TCEQ PERMIT COVER SHEET

DUE DATE: November 28, 2016

Permit Review Status	
Critical Category	Antidegradation
Response Action	b(5) [redacted]
Facility Information	
Major/Minor	Minor – 995,000 GD
Permit No.	TX0136778 (WQ0014488003)
Facility Name:	City of Dripping Springs
Activity , SIC Code	POTW
ELG and/or WQ	WQ
Permit Action	Renewal without Changes
Anti-backsliding	N/A
WQMP update	N/A
SSOs issues	N/A
ESA Issues	N/A
Permit Term	3 – years
Receiving Stream information	
Segment No.	Treated effluent is discharged to Walnut Springs; thence to Onion Creek in Segment No. 1427 of the Colorado River Basin
On 303(d) list?	Yes (sulfate)
TMDL approved/completed?	No
TMDL implemented?	N/A

Concurrence

Valentine GV 11/21/16 Crawford (acting) hac w/ corrections 11/10/16 Wooster (acting) RDW 10/22/16 (w/ edits noted by Brad C. corrected)

Valentine (Email)_____ Rosborough (Mail)_____

TPDES PERMIT NO. WQ0014488003
[For TCEQ office use only - EPA I.D. No. TX0136778]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

City of Dripping Springs

whose mailing address is

P.O. Box 384
Dripping Springs, Texas 78620

is authorized to treat and discharge wastes from the City of Dripping Springs South Regional Wastewater Treatment Facility, SIC Code 4952

located at 23127 Ranch-to-Market Road 150, in the City of Dripping Springs, Hays County, Texas 78620

to Walnut Springs; thence to Onion Creek in Segment No. 1427 of the Colorado River Basin

only according to effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, **September 1, 2019.**

ISSUED DATE:

For the Commission

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of the expansion to the 0.4975 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.399 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,111 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg. mg/l (lbs/day)	7-day Avg. mg/l	Daily Max. mg/l	Single Grab mg/l	Report Daily Avg. & Max. Measurement Frequency	Single Grab Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (17)	10	20	30	One/week	Grab
Total Suspended Solids	5 (17)	10	20	30	One/week	Grab
Ammonia Nitrogen*	1.9 (6.3)	5	10	15	One/week	Grab
Total Phosphorus*	0.15(**)(***) (0.5)	0.3	0.6	0.9	Daily	Grab
E. coli, colony forming units or most probable number per 100 ml	126	N/A	N/A	399	One/month	Grab

* Discharge limitations and monitoring requirements apply only when discharging to water in the state.
** The daily average is calculated as a median value. For months when discharge occurs on two or less days, the discharge limitation is 0.3 mg/l.
*** The daily average of 0.15 mg/l is based on a long-term average of 0.10 mg/l.

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per week by grab sample.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the completion of expansion to the 0.4975 million gallons per day (MGD) facility and lasting through the completion of the expansion to the 0.995 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.4975 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,382 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg. mg/l (lbs/day)	7-day Avg. mg/l	Daily Max. mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (21)	10	20	30	One/week	Grab
Total Suspended Solids	5 (21)	10	20	30	One/week	Grab
Ammonia Nitrogen*	1.7 (7.1)	5	10	15	One/week	Grab
Total Phosphorus*	0.15(**)(***) (0.62)	0.3	0.6	0.9	Daily	Grab
E. coli, colony forming units or most probable number per 100 ml	126	N/A	N/A	399	One/month	Grab

* Discharge limitations and monitoring requirements apply only when discharging to water in the state.
** The daily average is calculated as a median value. For months when discharge occurs on two or less days, the discharge limitation is 0.3 mg/l.
*** The daily average of 0.15 mg/l is based on a long-term average of 0.10 mg/l.

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per week by grab sample.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the completion of the expansion to the 0.995 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.995 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 2,764 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg. mg/l (lbs/day)	7-day Avg. mg/l	Daily Max. mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (42)	10	20	30	One/week	Composite
Total Suspended Solids	5 (42)	10	20	30	One/week	Composite
Ammonia Nitrogen*	1.2 (10)	3	10	15	One/week	Composite
Total Phosphorus*	0.15(**)(***) (1.2)	0.3	0.6	0.9	Daily	Composite
E. coli, colony forming units or most probable number per 100 ml	126	N/A	399	N/A	Two/month	Grab

* Discharge limitations and monitoring requirements apply only when discharging to water in the state.
** The daily average is calculated as a median value. For months when discharge occurs on two or less days, the discharge limitation is 0.3 mg/l.
*** The daily average of 0.15 mg/l is based on a long-term average of 0.10 mg/l.

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored daily by grab sample at each chlorine contact chamber. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per week by grab sample.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

   a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.

   b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

   c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

   d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

   e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

   f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

   a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

      i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.

6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Effective December 21, 2016, monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

c. Records of monitoring activities shall include the following:

i. date, time and place of sample or measurement;

ii. identity of individual who collected the sample or made the measurement.

iii. date and time of analysis;

iv. identity of the individual and laboratory who performed the analysis;

v. the technique or method of analysis; and

vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later

than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

      i. Unauthorized discharges as defined in Permit Condition 2(g).

      ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.

      iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

   c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

   d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

   All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after

becoming aware of or having reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. One hundred micrograms per liter (100 µg/L);

   ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

   iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. Five hundred micrograms per liter (500 µg/L);

   ii. One milligram per liter (1 mg/L) for antimony;

   iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

11. All POTWs must provide adequate notice to the Executive Director of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

c. For the purpose of this paragraph, adequate notice shall include information on:

   i. The quality and quantity of effluent introduced into the POTW; and

   ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

   a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

   b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

      i. Violation of any terms or conditions of this permit;

      ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

      iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

   a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

   b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

   c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

   d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.

   e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

   a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or

      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;

      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

   c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

   d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

   e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

   f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be

modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

   a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

   b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

   This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

   Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

   A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

   The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

    The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy

    a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 Bankruptcy) of the United States Code (11 USC) by or against:

i. the permittee;

ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or

iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

b. This notification must indicate:

i. the name of the permittee and the permit number(s);

ii. the bankruptcy court in which the petition for bankruptcy was filed; and

iii. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 169) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:

   i. Volume of waste and date(s) generated from treatment process;
   ii. Volume of waste disposed of on-site or shipped off-site;
   iii. Date(s) of disposal;
   iv. Identity of hauler or transporter;
   v. Location of disposal site; and
   vi. Method of final disposal.

   The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. **The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Sewage Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.

2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.

3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 11) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

Pollutant	Ceiling Concentration (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B pathogen requirements.

a. For sewage sludge to be classified as Class A with respect to pathogens, the density of fecal coliform in the sewage sludge be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. For sewage sludge to be classified as Class AB with respect to pathogens, the density of fecal coliform in the sewage sludge be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met.

   Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

   The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

   At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

   Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information.

   Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

c. Sewage sludge that meets the requirements of Class AB sewage sludge may be classified a Class A sewage sludge if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.

d. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.

vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Sewage sludge shall be injected below the surface of the land.

ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When sewage sludge that is incorporated into the soil is Class A or Class AB with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- once during the term of this permit
PCBs	- once during the term of this permit

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

Amount of sewage sludge (*) metric tons per 365-day period	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) *The amount of bulk sewage sludge applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7.

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

Pollutant	Cumulative Pollutant Loading Rate (pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

Pollutant	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.

2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC § 312.41 and the Management Requirements in accordance with 30 TAC § 312.44.

3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:

   a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

   b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.

   c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

   a. The location, by street address, and specific latitude and longitude, of each land application site.

   b. The approximate time period bulk sewage sludge will be applied to the site.

   c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at

the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B sludge, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

   "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

   a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.

   b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.

   c. The number of acres in each site on which bulk sludge is applied.

   d. The date and time sludge is applied to each site.

e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.

f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.

4. The frequency of monitoring listed in Section I.C. that applies to the permittee.

5. Toxicity Characteristic Leaching Procedure (TCLP) results.

6. PCB concentration in sludge in mg/kg.

7. Identity of hauler(s) and TCEQ transporter number.

8. Date(s) of transport.

9. Texas Commission on Environmental Quality registration number, if applicable.

10. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.

11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.

12. Level of pathogen reduction achieved (Class A, Class AB or Class B).

13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.

14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge transported in dry tons/year.

17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.

18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk sewage sludge is applied.

    c. The date and time bulk sewage sludge is applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.

    e. The amount of sewage sludge (i.e., dry tons) applied to each site.

    The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

D. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 11) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.

F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.

2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Toxicity Characteristic Leaching Procedure (TCLP) results.

3. Annual sludge production in dry tons/year.

4. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.

5. Amount of sludge transported interstate in dry tons/year.

6. A certification that the sewage sludge meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

7. Identity of hauler(s) and transporter registration number.

8. Owner of disposal site(s).

9. Location of disposal site(s).

10. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION IV. REQUIREMENTS APPLYING TO SLUDGE TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge that is transported to another wastewater treatment facility or facility that further processes sludge. These provisions are intended to allow transport of sludge to facilities that have been authorized to accept sludge. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge, nor do they limit the ability of the receiving facility to request additional testing or documentation.

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.

2. Sludge may only be transported using a registered transporter or using an approved pipeline.

B. Record Keeping Requirements

1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:

   a. the amount of sludge transported;

   b. the date of transport;

   c. the name and TCEQ permit number of the receiving facility or facilities;

   d. the location of the receiving facility or facilities;

   e. the name and TCEQ permit number of the facility that generated the waste; and

   f. copy of the written agreement between the permittee and the receiving facility to accept sludge.

2. For sludge transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge transported.

3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

C. Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. the annual sludge production;
3. the amount of sludge transported;
4. the owner of each receiving facility;
5. the location of each receiving facility; and
6. the date(s) of disposal at each receiving facility.

OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

   This Category C facility must be operated by a chief operator or an operator holding a Category C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.

3. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 1427 of the Colorado River Basin and any subsequent updating of the water quality model for Segment No. 1427 to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC § 305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.

4. The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).

5. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

6. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, 1/month may be reduced to 1/quarter in the Interim I and II phases and 2/month may be reduced to 1/month in the Final phase. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

7. Prior to construction of the Interim I, II and Final phase treatment facility, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). The permittee shall submit plans and specifications and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for

Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Pages 2, 2a and 2b of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

8. Monitoring and reporting requirements according to 30 TAC §§ 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge from the facility described by this permit, whichever occurs first. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 11) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first and prior to completion of each additional phase on Notification of Completion Form 20007.

9. Within 90 days from the start-up of the facility, the permittee shall provide an effluent analysis for nitrate-nitrogen at Outfall 001 while the facility is treating effluent to the quality permitted to discharge to water in the state. The result of this analysis and the laboratory report shall be submitted to the Municipal Permits Team, Wastewater Permitting Section (MC 148), TCEQ Water Quality Division for pollutant screening. Based on the technical review of the submitted analytical result, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements for nitrate-nitrogen. Test method utilized shall be according to the test procedure specified in the Definitions and Standard Permit Conditions section of this permit and sensitive enough to detect the indicated parameter to the minimum analytical level of 100 µg/L.

10. Within 30 days after operating the new facility under this permit, the permittee shall apply for the cancellation of TCEQ Permit No. WQ0014488001, City of Dripping Springs.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   d. Any pollutant, including oxygen-demanding pollutants (e.g., biological oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].*

3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

   Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Applica Their Contacts during Applicat n Process
Mailing List for Notice

TCEQ Permit No. WQ0014488003

Applicant Information

Legal Name of Facility Owner City of Dripping Springs

Operator (if required to be co-permittee) N/A

Permit Mailing Address P.O. Box 384
Dripping Springs, Texas 78620

CN602491284 RN104005434

Contact Information

Applicant's Representative(S) or Contact Person during Application Process

Mr. Robert Callegari, P.E., Principal
CMA Engineering, Inc.
235 Ledge Stone Drive
Austin, Texas 78737
Phone: 512-432-1000
Fax: 512-432-1015
Email: rcallegari@cma-engineering.com

Ms. Ginger Faught, City Administrator
City of Dripping Springs
P.O. Box 384
Dripping Springs, Texas 78620
Phone: 512-858-4725
Fax: 512-858-5646
Email: gfaught@cityofdrippingsprings.com

Notice To Be Published By

Mr. Robert Callegari, P.E., Principal
CMA Engineering, Inc.
235 Ledge Stone Drive
Austin, Texas 78737
Phone: 512-432-1000
Fax: 512-432-1015
Email: rcallegari@cma-engineering.com

Mailing Lists

Fixed State Mailing List (By Chief Clerk)

County Mailing List Hays

City to Be Notified for Plant Dripping Springs

City to Be Notified for Outfall(s) Drippings Springs

Notice to GLO N/A

Adjacent/Downstream Landowners List plus Interested Persons

Landowner Mailing List Attached (X) Yes () No

Bilingual Notice Required (X) Yes () No Spanish

Notify Following County Judges Only If They Officially Requested To Be Notified Of All Permit Actions (Only Applies To Facilities with A Flow of 5 MGD or Greater)

N/A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 28, 2016

Mr. Robert Callegari, P.E.
CMA Engineering, Inc.
235 Ledge Stone Drive
Austin, Texas 78737

Re: City of Dripping Springs - TPDES Permit No. WQ0014488003, EPA ID No. TX0136778 (CN602491284; RN104005434)

Dear Mr. Callegari:

Enclosed for your review and comment is a copy of a draft permit and statement of basis/technical summary and Executive Director's preliminary decision for the above-referenced operation. This draft permit is subject to further staff review and modification; however, we believe it generally includes the terms and conditions that are appropriate to your discharge. **Please read the entire draft carefully and note the following:**

1. The draft permit will be issued to expire **September 1, 2019**, in accordance with 30 Texas Administrative Code (TAC) § 305.71, Basin Permitting.

2. Effective December 21, 2016, monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

3. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

4. Effective September 1, 2020, the permittee must submit the annual sludge report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The Reporting Requirements of the Sludge Provisions have also been updated.

5. Accidental discharges or spills of treated or untreated wastewater from wastewater treatment facilities or collection systems owned or operated by a local government may be reported on a monthly basis in accordance with 30 TAC § 305.132.

Also enclosed for your review and comment is a copy of the draft second notice, the Notice of

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: SAY 7/26/16 Firoj Vahora, Team Leader
Municipal Permits Team, Wastewater Permitting Section

Date: 7/25/2016

From: Julian D. Centeno, Jr., Municipal Permits Team

APPLICANT: City of Dripping Springs
PLANT NAME: City of Dripping Springs South Regional WWTP
TPDES PERMIT NO: WQ0014488003 EPA ID NO: TX0136778

FILE NAME: I:\WQ\MUNI\JULIAN\PERMITS\14488.003.docx

Admin Complete:	12/7/2015	Modeling:	✓	Tech Complete:	7/25/2016
Standards:	✓	Pretreatment:	✓	RFI Letter:	10/29/2015, 11/9/2015, 7/11/2016
Critical Condition:		Assign Date:	6/10/2016	Response Letter:	11/23/2015, 12/14/2015, 7/14/2016

PERMIT TYPE

☒ PUBLIC DOMESTIC
☐ PRIVATE DOMESTIC

☒ Discharge (TPDES)
☐ Land Application (Irrigation)

☒ MINOR (< 1 MGD)

PERMIT ACTION

New Permit

PERMIT PACKAGE

YES	NO	
☒	☐	Transmittal letter to applicant
☒	☐	Transmittal letter to EPA
☒	☐	Statement of Basis/Technical Summary and ED Preliminary Decision
☒	☐	Permit Draft
☒	☐	Pretreatment Requirements for POTWs
☐	☒	Authorization to dispose of sewage sludge on property adjacent to WWTP in draft permit:
☐	☒	Includes appropriate other requirements (including quarterly and annual reporting, soil monitoring, language in notice and fact sheet, attachments.
☒	☐	EPA REVIEW CHECKLIST
☒	☐	FACILITY PROCESS FORM for PARIS
☒	☐	NOTICE for admin complete on or after 9/1/99
☒	☐	CAPTION (also saved in **I:\EVERYONEwq\CAPTION**)
☒	☐	Legislative Notice (SB709) required **(saved in I:\WQ\Muni\LEGISLATIVE NOTICE)**
☐	☒	MAJOR/MINOR DETERMINATION if needed
☐	☒	LOCATED IN THE COASTAL ZONE (if located in coastal zone, include **CMP Threshold Review Sheet)**
☒	☐	SPELLCHECK: DRAFT PERMIT/TECH SUM/SOB/FACT SHEET/NOTICE/LETTER(S)
☒	☐	**SCHEDULE FOR ERC Part A: All major and minor amendments, new applications and permits in Edwards Aquifer area are scheduled for ERC**
☒	☐	Located in the Edwards Aquifer area: contributing zone
☒	☐	**COMPLIANCE HISTORY:** ***(Prepare CH before finalizing draft permit and edit as needed)***
☒	☐	ENFORCEMENT ORDER(S); July 25, 2016
☐	☒	CHANGES TO THE DRAFT PERMIT based on discussion at ERC

COMMENTS: New facility to replace TCEQ Permit No. WQ0014208001, Hays County Development District No. 1, and TCEQ Permit No. WQ0014488001, City of Dripping Springs.

Request for Comments on Draft Permit
TCEQ – Water Quality Division
Phone: (512)239-4671
Fax: (512)239-4430
Mailing Address: TCEQ, Water Quality Division, P.O. Box 13087, Austin, TX 78711-3087

TO: Region: **11**

Submitted by: **Julian D. Centeno, Jr.** E-Mail ID: **Julian.Centeno@tceq.texas.gov** Phone: **(512) 239-4608**

Date Request Submitted:

Comments Deadline: Within 10 business days

Date Application Received by TCEQ in Austin: **October 20, 2015**

REGIONAL OFFICES: The entity below has submitted an application for the project referenced below in accordance with regulations of the TCEQ. Please return comments ASAP, but no later than the comments deadline, which is 10 days from the submittal date. Permit disposition will proceed after comments are received or after the comments deadline has passed. If no comments are received within this time frame, we will assume you have no comments or objections to the project as proposed. Please return a complete copy of the form (both sides) with your comments.

PROJECT TYPE: **New Permit**

TEAM ASSIGNED: **MUNICIPAL**

APPLICATION TYPE: ☒ **TPDES** ☐ **TLAP**

REGULATED ENTITY NO.: **RN104005434**

PERMIT NO.: **WQ0014488003**

CUSTOMER REFERENCE NO.: **CN602491284**

COMPANY NAME: **City of Dripping Springs**

PLANT NAME: **City of Dripping Springs South Regional WWTP**

ADDRESS: **P.O. Box 384, Dripping Springs, Texas 78620**

SEGMENT: **1427**

COUNTY: **Hays**

TECHNICAL CONTACT: **Mr. Robert Callegari, P.E.**

PHONE: **512-432-1000**

PERMIT CLASSIFICATION: **MINOR**

COMPLIANCE RATING: CN = 11.72; RN = 11.72

SUMMARY OF APPLICATION REQUEST: New application to discharge process domestic wastewater.

PERMIT WRITER COMMENTS: Will replace TCEQ Permit No. WQ0014208001, Hays County Development District No. 1, and TCEQ Permit No. WQ0014488001, City of Dripping Springs.

RESPONSE TO REQUEST FOR COMMENTS ON DRAFT PERMIT

TO: **Julian D. Centeno, Jr.**

FROM: Region: **11**

Copy of Application Received by your Office: ☐ YES ☐ NO Date Received: _____

COMPANY NAME: City of Dripping Springs

PERMIT NO.: WQ0014488003

REGULATED ENTITY NO: RN104005434

Investigator's/Compliance Officer's Name (Please Print): _____

Phone: _____

Comments Deadline (from pg. 1):

Date of Last Site Visit: _____

COMMENTS ON CONDITIONS: (Please mark up the draft special conditions with your comments. Please address applicability and enforceability. List any additional conditions below):

Compliance Determination Conditions: _____

_____

_____

_____

_____

_____

_____

_____

_____

General Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

ATTACHMENT 1

EPA - REGION 6
NPDES PERMIT CERTIFICATION CHECKLIST

In accordance with the MOA established between the State of Texas and the United States Environmental Protection Agency, Region 6, the Texas Commission on Environmental Quality submits the following draft Texas Pollutant Discharge Elimination System (TPDES) permit for Agency review.

Major ☐ **Minor** ☒ **POTW** ☒ **Private Domestic** ☐ **Non-POTW** ☐

Permittee	City of Dripping Springs		
SIC Code	4952		
Regulated Activity	Domestic Wastewater Permit		
EPA ID No.	TX0136778	**TPDES Permit No.**	WQ0014488003
Segment No.	1427	**Basin**	Colorado River Basin
Receiving Water	Walnut Springs; thence to Onion Creek		

	Answer the following	**Yes**	**No**	**N/A**
1.	Are there known or potential interstate water issues associated with this permit?	☐	☒	☐
2.	Is there known or potential third-party interest/environmental concern regarding this permit action?	☐	☒	☐
3.	Does this facility discharge to a 303(d) listed waterbody segment?	☒	☐	☐
	If **YES**, does the facility discharge any of the pollutant(s) of concern identified in the 303(d) listing?	☒	☐	☐
4.	Is this permit consistent with the approved WQMP?	☐	☒	☐
5.	Does the facility discharge to a waterbody segment that has a finalized TMDL?	☐	☒	☐
	If **YES**, does the permit implement the TMDL consistent with the WLAs?	☐	☐	☒
6.	Does the technical summary/statement of basis document the rationale for the inclusion/omission of permit conditions for each 303(d) listed pollutant of concern or TMDL pollutant?	☒	☐	☐
7.	Has a priority watershed of critical concern been identified by the U.S. Fish and Wildlife Service for this segment?	☒	☐	☐
8.	Does this permit authorize ammonia discharges > 4.0 mg/l at the edge of the mixing zone?	☐	☒	☐
9.	Does this permit require testing for Whole Effluent Toxicity in accordance with the state's standard practices and implementation plan?	☐	☒	☐

ATTACHMENT 1
EPA – REGION 6
NPDES PERMIT CERTIFICATION CHECKLIST
Page 2 of 2

10.	If this facility has completed and implemented a Toxicity Reduction Evaluation (TRE), has any subsequent toxicity been identified?	☐	☐	☒
11.	Does this permit propose to grant a variance request *(WQS, FDF, etc.)* or does it incorporate a proposed or final approval of a variance request?	☐	☒	☐
12.	If a POTW is ≥ 5 MGD, does it have an approved Pretreatment Program?	☐	☐	☒
13.	Since the last permit issuance, has the POTW had a new Pretreatment Program approved or a Pretreatment Program modification approved?	☐	☐	☒
14.	Does this permit contain authorization for wet weather related peak-flow discharges?	☐	☒	☐
15.	Does this permit include a bypass of any treatment unit or authorize overflows in the system?	☐	☒	☐
16.	Does this permit include provisions for effluent trading?	☐	☒	☐
17.	Does this permit contain specific issues on which EPA and the state are not in agreement regarding the permitting approach?	☐	☒	☐
18.	Is this facility subject to a national effluent limitations guideline? Please specify:	☐	☒	☐
19.	Does this permit contain first-time implementation of a new federal guideline, policy, regulation, etc.? Please specify:	☐	☒	☐
20.	Is this a new facility or an expansion of an existing facility?	☒	☐	☐
21.	Does this permit incorporate any exceptions to the standards or regulations?	☐	☒	☐
22.	If this is a permit modification/amendment? Please specify:	☐	☒	☐

Name: Julian D. Centeno, Jr.

Date: 7/25/2016

MUNICIPAL EPA REVIEW CHECKLIST

Permittee Name: City of Dripping Springs
Permit Number: TPDES Permit No. WQ0014488003, EPA ID No. TX0136778

NOTE: Minor amendments, endorsements, and minor modifications (except for pretreatment) are exempt from EPA review. ***However, HSC permits [Seg Nos. 1001, 1005, 1006, 1007, 1016, 2426, 2427, 2428, 2429, 2430, and 2436] require review by modeling to ensure that the loading is consistent with the revised WLE-1R, so you may need to check with the modeler or check the most recent modeling memo to confirm that the loading is consistent.***

For renewal, amendment or new permits check any items that apply to determine if the permit is subject to EPA review:

PLEASE CHECK ☒ ALL THE APPLICABLE BELOW:
Draft permit authorizes:

YES	NO	
☐	☒	Discharge from a designated major facility
☐	☒	Discharge from a POTW with an approved pretreatment program
☐	☒	Discharge from a facility with a daily/annual average flow >1.0 MGD
☒	☐	Discharge to a critical concern species watershed that requires EPA review
☐	☒	Discharge that includes a request for a water quality variance
☐	☒	Storm water discharge to high priority species watershed
☒	☐	Prior to a final TMDL, new permit, or expanded discharge to an impaired listed 303(d) listed segment, and that has the potential to discharge any pollutant that is causing or contributing to the impairment.
☐	☒	After a final TMDL, new permit or expanded discharge to an impaired listed 303(d) listed segment where the TMDL does not allocate the loadings described in the draft permit
☐	☒	After a final TMDL, a permit with effluent limits that allow loadings in excess of those prescribed by the TMDL for the segment
☐	☒	After a final TMDL, a permit that allows **more** than a 3-year schedule for an existing facility to be in compliance with final effluent limits based on the TMDL allocation (new facilities have to be compliant upon discharge)
☐	☒	Discharge directly to territorial seas of the United States (from the coastline to 3 miles out but not including Bays and Estuaries)
☐	☒	Discharge or sewage sludge management that may affect another state or Mexico. For sewage sludge management, Amay affect@ means, accepts sewage sludge from another state or Mexico. For discharge, it means a discharge within 3 miles of a boundary with another state or Mexico.
☐	☒	Discharge from a Class I sludge management facility. (A Class I facility is a POTW or combination of POTWs operated by the same authority with a design flow of >5 MGD and that have IUs and are required to have an approved pretreatment program or are subject to pretreatment standards, **OR** any other treatment works treating domestic sewage sludge classified as a Class I sludge management facility by the Regional Administrator in conjunction with the TCEQ.)

If any column is marked "YES", EPA must receive a copy of the full permit package.
If all columns are marked "NO", EPA does not need to review the draft permit.

Permit Writer: Julian D. Centeno, Jr.
Date: 7/25/2016

PARIS FACILITY EXTENSION - TREATMENT PROCESS
TPDES PERMIT NO. WQ0014488003

PERMITTEE: City of Dripping Springs
PLANT NAME: City of Dripping Springs South Regional WWTP
Application New Permit ☒ **Interim I** ☒ **Interim II** ☒ **Final**

WASTEWATER TREATMENT

Primary Treatment
02 ✓Preliminary treatment – bar screen
03 Preliminary treatment – grit removal
04 Preliminary treatment - comminutors
05 Preliminary treatment - others
B1 Imhoff tank
06 Scum removal
07 Flow equalization basins
08 Preaeration
09 Primary sedimentation
D2 Septic tank
A5 Facultative lagoon

Secondary Treatment
10Trickling filter – rock media
11 Trickling filter – plastic media
12 Trickling filter – redwood slats
13 Trickling filter – other media
14 Activate sludge – conventional
15 Activate sludge – complete mix
16 Activate sludge – contact stabilization
17 Activated sludge – extended aeration
18 Pure oxygen activate sludge
19 Bio-Disc (rotating biological filter)
20 Oxidation ditch
21 Clarification using tube settlers
22 ✓Secondary clarification
B6 Constructed wetlands
E5 Natural treatment
E6 Overland flow

Advanced Treatment - Biological
23 Biological nitrification – separate stage
24 Biological nitrification - combined
25 ✓Biological denitrification
26 Post aeration (reaeration)

Advanced Treatment –
27 Microstrainers – primary
28 Microstrainers – secondary
D1 Dunbar Beds
29 Sand filters
30 ✓Mix media filters (sand and coal)
31 Other filtrations
B2 Bubble diffuser (compressor)
32 Activated carbon – granular
B3 Mechanical surface aerator
33 Activated carbon-powered
34 Two stage lime treatment of raw
35 Two stage tertiary lime treatment
36 Single stage lime treatment of raw
37 Single state tertiary lime treatment
38 Recarbonation
39 Neutralization
40 Alum addition to primary
41 ✓Alum addition to secondary
42 Alum addition to separate state tertiary
43 Ferri-chloride addition to primary
44 Ferri-chloride addition to secondary
45 Ferri-chloride addition to separate stage
46 Other chemical additions
47 Ion exchange
48 Breakpoint chlorination
49 Ammonia stripping
50 Dechlorination

Disinfection
51 ✓Chlorination for disinfection
52 Ozonation for disinfection
53 Other disinfection
D3 Ultra violet light

Land Treatment
54 Land treatment of primary effluent
55 Land treatment of secondary effluent
56 Land treatment of intermediate effluent (less than secondary)

Other Treatment
57 Stabilization ponds
58 Aerated lagoons
59 Outfall pumping
60 Outfall diffuser
61 Effluent to other plants
62 Effluent outfall
63 ✓Other treatment(Bardenpho)
64 Evapo-transpiration beds
64 Recalcination

Disposal Method
A7 Irrigation – public access
A8 Irrigation – agricultural
B4 Evapo-transpiration beds
B6 Constructed wetlands
C1 Irrigation – pastureland
D4 Pressure dosing system
D5 Percolation system
D8 Other reuse method
E1 Evaporation/plays
E2 ✓Discharge only
E3 Discharge and (use other #)
E4 Injection well(s)

SLUDGE TREATMENT PROCESSES
65 Aerobic digestion – air
66 Aerobic digestion – oxygen
67 Composting
68 Anaerobic digestion
69 Sludge lagoons
70 Heat treatment – dryer
71 Chlorine oxidation of sludge
72 Lime stabilization
73 Wet air oxidation
74 Dewatering – sludge drying beds, sand
F2 Dewatering – sludge drying bed vacuum
75 Dewatering – mechanical-vacuum filter
76 Dewatering – mechanical – centrifuge
77 Dewatering – mechanical – filter press
78 Dewatering – others
79 Gravity thickening
80 Air flotation thickening
D6 ✓Sludge holding tank

Incineration
81 Incineration – multiple hearth
82 Incineration – fluidized beds
83 Incineration – rotary kiln
84 Incineration –others
85 Pyrolysis
86 Co-incineration with solid waste
87 Co-pyrolysis with solid waste
88 Co-incineration - others

SLUDGE DISPOSAL
89 Co-disposal landfill
D7 Sludge – only monofill
90 Land application (permitted)
91 Commercial land application (register)
92 Trenching
B5 Transport to another WWTP
F3 Transport to Regional compost
94 Other sludge handling
95 Digest gas utilization facilities
E7 Commercial land application (permit)
F4 Dedicated land disposal
F5 Marketing and distribution composted
F6 Marketing and distribution non-

MISCELLANEOUS
01 Pumping raw wastewater
96 Control/lab/maintenance buildings
97 Fully automated using digital control -
98 Fully automated using analog control
99 Semi-automated plant
A1 Manually operated and controlled plant
A2 Package plant
A3 Semi-package plant
A4 Custom built plant
A7 Irrigation – public access
A8 Irrigation – agriculture
A9 Effluent storage ponds (irrigation)
C1 Irrigation – pastureland
D8 Other reuse method
D9 ✓Emergency holding tank
E1 Evaporation or playa
E8 Monitoring wells
E9 Biomonitoring
F7 Stormwater (SSO)
F8 Unconventional

PERMIT Julian D. Centeno, Jr.
Municipal Permits Team
Wastewater Permitting Section, Water Quality Division
Date: 7/25/2016

EXECUTIVE REVIEW COMMITTEE, PART C

City of Dripping Springs, Application for New TPDES Permit No. WQ0014488003

Reason brought to ERC: Agreed Order 2012-0801-MWD-E for the facility permitted under TCEQ Permit No. WQ0014488001 (closed)

Issues in Agreed Order: Failure to submit noncompliance notification on time (resolved)

Most recent ICIS data: None; the facility is not yet built.

Current Permit Action: New

Facility Description: Activated sludge biologcal nutrient removal process with tertiary filtration and chlorination in all phases

Proposed Permit Limitations: Q = 0.399 MGD in the Interim I phase, 0.4975 MGD in the Interim II phase, and 0.995 MGD in the Final phase; Effluent Set = 5/5/1.9,1.7,1.2 (Interim I, II, and Final phase, respectively)/0.15 TP/6.0/126 *E. coli* CFU or MPN per 100 ml

Operator Classification: C

Input from Region/Enforcement: Carolyn Runyon of Region 11

Recommendation from Regional Office: None.

Recommendation for the Facility: No Additional provision necessary.

Attachments:

1. Compliance History
2. Communication with TCEQ Region 4.

The TCEQ is committed to accessibility.
To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.

Compliance History Report

PUBLISHED Compliance History Report for CN602491284, RN104005434, Rating Year 2015 which includes Compliance History (CH) components from September 1, 2010, through August 31, 2015.

Customer, Respondent, or Owner/Operator: CN602491284, City of Dripping Springs **Classification:** SATISFACTORY **Rating:** 11.72

Regulated Entity: RN104005434, CITY OF DRIPPING SPRINGS **Classification:** SATISFACTORY **Rating:** 11.72

Complexity Points: 7 **Repeat Violator:** NO

CH Group: 08 - Sewage Treatment Facilities

Location: 0.5 MI E OF RR 12 ON FM 150 HAYS, TX, HAYS COUNTY

TCEQ Region: REGION 11 - AUSTIN

ID Number(s):
WASTEWATER PERMIT WQ0014488001
WASTEWATER PERMIT WQ0014488003
WASTEWATER EPA ID TX0136778
EDWARDS AQUIFER PERMIT 11-07061501

Compliance History Period: September 01, 2010 to August 31, 2015 **Rating Year:** 2015 **Rating Date:** 09/01/2015

Date Compliance History Report Prepared: June 02, 2016

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: March 20, 2010 to June 02, 2016

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: GMT **Phone:** (512) 239-3581

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period? YES
2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
3) If **YES** for #2, who is the current owner/operator? N/A
4) If **YES** for #2, who was/were the prior owner(s)/operator(s)? N/A
5) If **YES**, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

1 Effective Date: 12/15/2012 ADMINORDER 2012-0801-MWD-E (1660 Order-Agreed Order With Denial)

Classification: Moderate

Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)(1)
30 TAC Chapter 305, SubChapter F 305.125(4)

Rqmt Prov Permit Condition 2g, Page 7 PERMIT

Description: Failure to prevent an unauthorized discharge of sludge into or adjacent to water in the state

Classification: Major

Citation: 2D TWC Chapter 26, SubChapter A 26.039(b)
30 TAC Chapter 305, SubChapter F 305.125(9)(A)

Rqmt Prov Monitoring Requirement 7a, Page 5 PERMIT

Description: Failure to submit a noncompliance notification orally or by fax to the TCEQ Regional Office within 24 hours of becoming aware of unauthorized discharges and in writing within five days to the TCEQ Regional Office and the Enforcement Division

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:
N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):
N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):
A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

1 Date: 02/10/2016 (1289946) CN602491284
Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)
No. 1, Page 16 PERMIT
Description: Failed to properly operate and maintain the facility. On December 16, 2015, a solenoid valve in the drip irrigation field failed to properly operate in zone 40 causing the saturation of zones 40 and 41. Treated effluent discharged off-site, south of the fields. The permitee reported that the total amount of treated effluent sent to these fields would have been 7,500 gallons and the estimated volume of the unauthorized discharge was approximately 3,750 gallons.

F. Environmental audits:
N/A

G. Type of environmental management systems (EMSs):
N/A

H. Voluntary on-site compliance assessment dates:
N/A

I. Participation in a voluntary pollution reduction program:
N/A

J. Early compliance:
N/A

Sites Outside of Texas:
N/A

Julian Centeno

From: Carolyn Runyon
Sent: Monday, July 25, 2016 8:10 AM
To: Julian Centeno
Subject: RE: City of Dripping Springs, Application for a new TPDES Permit NO. WQ0014488003

Importance: High

No concerns...thanks Julian!

From: Julian Centeno
Sent: Friday, July 22, 2016 3:58 PM
To: Carolyn Runyon
Subject: RE: City of Dripping Springs, Application for a new TPDES Permit NO. WQ0014488003

Latest compliance history report and order attached. Sorry.

Julian

From: Carolyn Runyon
Sent: Friday, July 22, 2016 3:52 PM
To: Julian Centeno <julian.centeno@tceq.texas.gov>
Subject: RE: City of Dripping Springs, Application for a new TPDES Permit NO. WQ0014488003
Importance: High

Hi Julian,

Was there supposed to be an attachment?

From: Julian Centeno
Sent: Friday, July 22, 2016 3:50 PM
To: Carolyn Runyon
Subject: City of Dripping Springs, Application for a new TPDES Permit NO. WQ0014488003
Importance: High

Hello Carolyn,

As discussed this afternoon, this is an application for a new discharge facility (Hays County, minor), which will eventually replace two existing permits, TCEQ Permit No. WQ0014488001, City of Dripping Springs, in operation and no-discharge, and WQ0014208001, Hays County Development District No. 1, unbuilt and no-discharge. The compliance history shows one agreed order, 2012-0801-MWD-E (closed). Will the Region have any concerns regarding this application?

Thanks a lot.

Julian

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Location: 0.5 MI E OF RR 12 ON FM 150 HAYS, TX, HAYS COUNTY

TCEQ Region: REGION 11 - AUSTIN

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WASTEWATER PERMIT WQ0014488003
WASTEWATER EPA ID TX0136778
EDWARDS AQUIFER PERMIT 11-07061501

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Rqmt Prov. Permit Condition 2g, Page 7 PERMIT

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Rqmt Prov. Monitoring Requirement 7a, Page 5 PERMIT

Description: Failure to submit a noncompliance notification orally or by fax to the TCEQ Regional Office within 24 hours of becoming aware of unauthorized discharges and in writing within five days to the TCEQ Regional Office and the Enforcement Division

B. Criminal convictions:

N/A

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

Date: May 19, 2016

To: Municipal Permits Team

Thru: Rebecca Villalba, Stormwater & Pretreatment Team Leader

From: RB Ryan Bucek, Pretreatment Coordinator

2C peer review 5/27/16

Subject: Pretreatment program option for the TPDES Permit No. WQ0014488003, City of Dripping Springs – South Regional WWTF summary sheet

I have reviewed the above referenced permit and have determined that the POTW receives the standard pretreatment language. This memo is placed in I:\WQ\muni\pret\memos\14488-003memo.doc.

Option 1: This general pretreatment boilerplate language should be put in TPDES permits for all POTWs that do not have either an approved pretreatment program or requirement to develop a new pretreatment program.

Within this standard language, the Pretreatment Program has not incorporated additional pretreatment language requirements. Please incorporate the following language for permittee's FACT SHEET, if applicable, under:

1. INDUSTRIAL WASTE CONTRIBUTION

The facility does not appear to receive significant industrial wastewater contributions.

2. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 315 which references 40 CFR Part 403, General Pretreatment Regulations for Existing and New Sources of Pollution *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].* The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

SUMMARY OF CHANGES FROM EXISTING PERMIT

This is a new permit for a new facility. The boilerplate pretreatment language has been added to the draft permit. The pretreatment requirements will continue until permit expiration.

City of Dripping Springs South Regional WWTF
WQ0014488003

COMPANY	ADDRESS	PHONE	CFR	SIC	SIC DESCRIPTION	LINE OF BUSINESS	Receiving WWTF*	DISCARGE CODE
CELTIC SEAFARE LLC	2001 W HIGHWAY 290	512-626-0899	408	2091	SALMON, SMOKED	CND CURD FISH SEA		NC
BEE LAVISH	705 W HIGHWAY 290	512-858-2337	-	2335	WEDDING GOWNS AND DRESSES	WMNS MISSES DRESSE		NC
DEVOS CUSTOM WOODWORKING	1451 W HIGHWAY 290	512-894-0464	429	2431	MILLWORK	MILLWORK		NC
THERMAL SOLUTIONS	151 E MERCER ST	512-829-4441	433	3398	METAL HEAT TREATING	REFRGRTN SVC REPAI		NC
AUSTIN CRYOGENICS COMPANY	205 CREEK RD	512-767-2850	-	3443	WELDMENTS	FBRCT PLT WK BLR SH		NC
VALLI & KIM LLC	100 COMMONS RD STE 7-341	512-423-3649	433	3499	FABRICATED METAL PRODUCTS, NEC	FBRCTD MTL PRDS NE	14488-001	SD
GORDON SWENSON	2111 W HIGHWAY 290	512-243-0679	433	3523	CATTLE FEEDING, HANDLING, AND WATERING EQUIPMENT	FARM MCHNRY EQPMT		NC
DR ROB SMITH	27490 RANCH ROAD 12 STE 1	512-858-9250	433	3843	ENAMELS, DENTISTS'	DENTAL EQPT SUPPLS		NC
T & L CONSULTING GROUP		512-718-5470	-	4731	FREIGHT TRANSPORTATION ARRANGEMENT	FRGT TRANS ARNGMNT		NC
JLMJR TRANSPORT LLC	107 CREEK RD	512-619-4708	-	4789	TRANSPORTATION SERVICES, NEC	TRANSPRTN SRVCS NE		NC
LASALLE CORRECTIONS TRNSPT LLC	26228 RANCH ROAD 12	512-858-7212	-	4789	TRANSPORTATION SERVICES, NEC	TRANSPRTN SRVCS NE		NC
PEDERNALES ELECTRIC COOP INC	661 W HIGHWAY 290	512-858-5611	423	4911	ELECTRIC SERVICES	ELECTRIC SERVICES	14488-001	SD
CENTRAL WASH CNTY WTR SUP CORP	26550 RANCH ROAD 12	512-894-3322	-	4941	WATER SUPPLY	WATER SUPPLY		NC
DRIPPING SPRING WATER SUPPLY	101 HAYS ST STE 406	512-858-7897	-	4941	WATER SUPPLY	WATER SUPPLY	14488-001	SD

All facilities above are located in Dripping Springs, TX 78620

Please indicate which WWTF (14488-001, 14488-002, or 14488-003) receives discharges

CODES

OD = Does not discharge any wastewater
D = Discharges process wastewater
SD = Discharges sanitary wastewater
NC = Not connected to WWTP service area
DD = Direct discharger to waters of the State

CFR

408 Canned and preserved seafood processing point source category
423 Steam electric power generating point source category
429 Timber products processing point source category
433 Metal finishing point source category

5/11/16 Notes:

Celtic Seafare LLC is no longer in business at 2001 W Hwy 290, Dripping Springs

Thermal Solutions is no longer in business at 151 E Mercer St., Dripping Springs

The (SD) connected services are connected to WWTF 14488-001

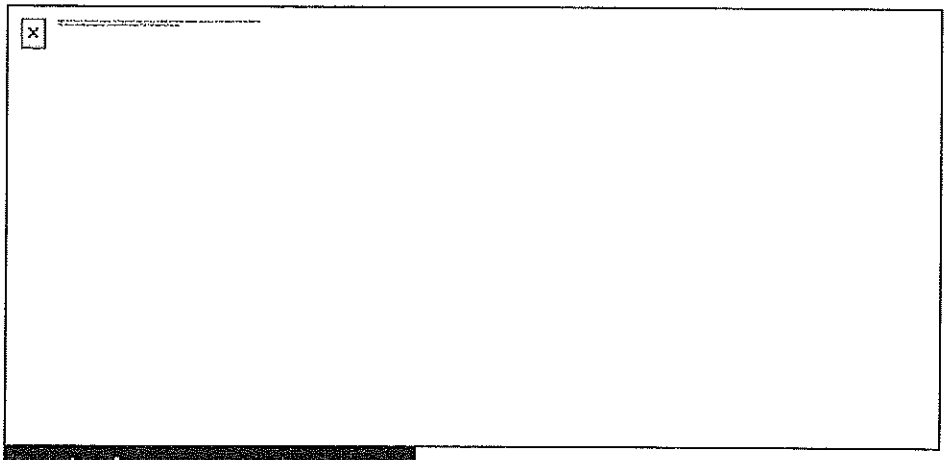
Same connections will connect to WWTF 14488-003 Discharge Permit when approved.

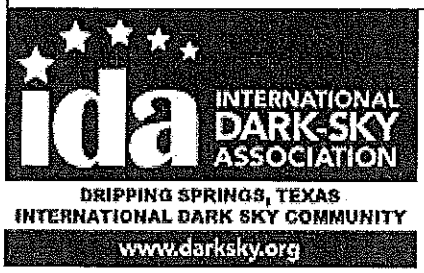
Ryan Bucek

From: Ginger Faught <GFaught@cityofdrippingsprings.com>
Sent: Thursday, May 19, 2016 9:39 AM
To: Ryan Bucek
Subject: FW: TCEQ# WQ0014488003 Permit Application - Industry Discharge Review
Attachments: TCEQ report-WQ0014488003 5-11-16.pdf

Ryan—
My apologies—I assumed incorrectly that our Utility Coordinator had sent this directly to you.

Please confirm receipt—thanks.





TCEQ Interoffice Memorandum

To: Municipal Permits Team
Wastewater Permitting Section

Thru: John Trevino, Standards Implementation Team Peer Review
Water Quality Assessment Section
Water Quality Division

From: Lili Murphy, Standards Implementation Team
Water Quality Assessment Section
Water Quality Division

Date: July 12, 2016

Subject: City of Dripping Springs; Permit no. 14488-003
New; Application received: Oct. 20, 2015

This memo supersedes memo dated April 19, 2016.

The discharge route for the above referenced permit is to Walnut Springs; thence to Onion Creek in Segment 1427 of the Colorado River Basin. The designated uses and dissolved oxygen criterion as stated in Appendix A of the Texas Surface Water Quality Standards (30 Texas Administrative Code §307.10) for Segment 1427 are primary contact recreation, public water supply, aquifer protection, high aquatic life use, and 5.0 mg/L dissolved oxygen. Aquifer protection applies to the contributing, recharge and transition zones of the Edwards Aquifer. The facility is located in the contributing zone and is approximately 19.4 miles to the recharge zone.

Since the discharge is directly to an unclassified water body, the permit action was reviewed in accordance with 30 Texas Administrative Code §307.4(h) and (l) of the 2010 Texas Surface Water Quality Standards and the TCEQ's implementation procedures for the standards. Based on a receiving water assessment and/or other available information, a preliminary determination of the aquatic life uses in the area of the discharge impact has been performed and the corresponding dissolved oxygen criterion assigned.

Walnut Springs; minimal aquatic life use; 2.0 mg/L dissolved oxygen.

In accordance with §307.5 and the TCEQ implementation procedures (June 2010) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical

TCEQ Interoffice Memorandum

To: Municipal Permits Team
Wastewater Permitting Section

From: James E. Michalk, Water Quality Modeler
Water Quality Assessment Team
Water Quality Assessment Section

Date: May 6, 2016

Subject: City of Dripping Springs; Wastewater Permit No. 14488-003 / TX0136778 (new)
Discharge to a tributary of Onion Creek, Segment 1427 of the Colorado River Basin

An analysis of the referenced applicant was conducted using an uncalibrated QUAL-TX model for interim effluent flows of 0.399 MGD and 0.4975 MGD and a final effluent flow of 0.995 MGD. The discharger is located in Hays County.

Based on model results, effluent sets of **5 mg/L $CBOD_5$, 1.9 mg/L NH_3-N and 6.0 mg/L DO** for the **0.399 MGD** flow phase; **5 mg/L $CBOD_5$, 1.7 mg/L NH_3-N and 6.0 mg/L DO** for the **0.4975 MGD** flow phase; and **5 mg/L $CBOD_5$, 1.2 mg/L NH_3-N and 6.0 mg/L DO** for the **0.995 MGD** flow phase are predicted to be necessary to ensure that dissolved oxygen levels will be maintained above the criteria established by the Standards Implementation Team for Walnut Springs (Creek) (2.0 mg/L) and Onion Creek (5.0 mg/L). These effluent limits comply with the requirements of the Colorado River Watershed Protection Rule (30 TAC 311, Subchapter E) and with the requirements of the Edwards Aquifer Rules (30 TAC 213, Subchapter A).

Coefficients and kinetics used in the model are a combination of site-specific, estimated, and standardized default values. The results of this evaluation can be reexamined upon receipt of information that conflicts with the assumptions employed in this analysis.

Segment 1427 is currently listed on the State's inventory of impaired and threatened waters (the 2014 Clean Water Act Section 303(d) list). The listing is specifically for sulfate from FM 967 upstream to the upper end of the segment (the most upstream crossing of FM 165 in Blanco County) (AUs 1427_03 and 1427_04).

The effluent limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The recommended limits are not contained in the approved WQMP. However, these limits will be included in the next WQMP update.

TCEQ Interoffice Memorandum

To: Municipal Permits Team
Wastewater Permitting Section

Thru: John Trevino, Standards Implementation Team Peer Review
Water Quality Assessment Section
Water Quality Division

From: Lili Murphy, Standards Implementation Team
Water Quality Assessment Section
Water Quality Division

Date: April 19, 2016

Subject: City of Dripping Springs; Permit no. 14488-003
New; Application received: Oct. 20, 2015

The discharge route for the above referenced permit is to Walnut Springs; thence to Onion Creek in Segment 1427 of the Colorado River Basin. The designated uses and dissolved oxygen criterion as stated in Appendix A of the Texas Surface Water Quality Standards (30 Texas Administrative Code §307.10) for Segment 1427 are primary contact recreation, public water supply, aquifer protection, high aquatic life use, and 5.0 mg/L dissolved oxygen. Aquifer protection applies to the contributing, recharge and transition zones of the Edwards Aquifer. The facility is located in the contributing zone and is approximately 19.4 miles to the recharge zone.

Since the discharge is directly to an unclassified water body, the permit action was reviewed in accordance with 30 Texas Administrative Code §307.4(h) and (l) of the 2010 Texas Surface Water Quality Standards and the TCEQ's implementation procedures for the standards. Based on a receiving water assessment and/or other available information, a preliminary determination of the aquatic life uses in the area of the discharge impact has been performed and the corresponding dissolved oxygen criterion assigned.

Walnut Springs; minimal aquatic life use; 2.0 mg/L dissolved oxygen.

In accordance with §307.5 and the TCEQ implementation procedures (June 2010) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in

CMA Engineering, Inc.

Firm No. F-3053

Robert P. Callegari, P.E.
Felix J. Manka, P.E.

July 14, 2016

Julian Centeno, Jr., P.E.
Municipal Permits Team
Wastewater Permitting Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: City of Dripping Springs
New TCEQ Permit Application
TPDES Permit Number WQ0014488003
Response to July 11, 2016 Comment E-mail
CMA Job Number 1695-001

Dear Mr. Centeno:

The following are responses to your July 11, 2016 comment e-mail:

Comment 1: Item 1(c)(3) on pages 21 and 22 of the technical report 1.1 (see Attachment 1): The applicant identified permitted wastewater facilities and/or collection systems within a three-mile radius of the proposed facility. To complete the response to this item, we need for you to please provide a list of these facilities and the reason why there is no need to contact these facilities.

Response 1: Attached is an exhibit illustrating a three-mile radius around the proposed facility. There are no wastewater facilities within the three mile radius. Below are the closest two wastewater facilities, and an explanation of why there is no need to contact these facilities.

> Arrowhead Ranch Utility Company LLC, Permit Number WQ0014824001. This is a land application permit, permitted for 125,000 GPD, with a majority of the application area located on an adjacent tract not owned by the developer. Additional land within the development is not available to increase the capacity of this wastewater facility. The City of Dripping Springs plans to provide wastewater service to this development in the future once the new permit is issued.
>
> Dripping Springs ISD, Permit Number WQ0013748002: This is a land application permit, permitted for 25,000 GPD, with the application area being public access land located at the school. Additional land is not available to increase the capacity of this wastewater facility.

Comment 2: Treatment Process Description (see Attachment 2): The application refers to the use of the existing effluent tank (cap 333,000 gal) for the Interim I and II phases with an additional effluent storage for the Final phase. Is there an estimate of the additional storage capacity for the Final phase?

235 Ledge Stone Dr.
Phone: (512) 432-1000

Austin, Texas 78737
Fax: (512) 432-1015

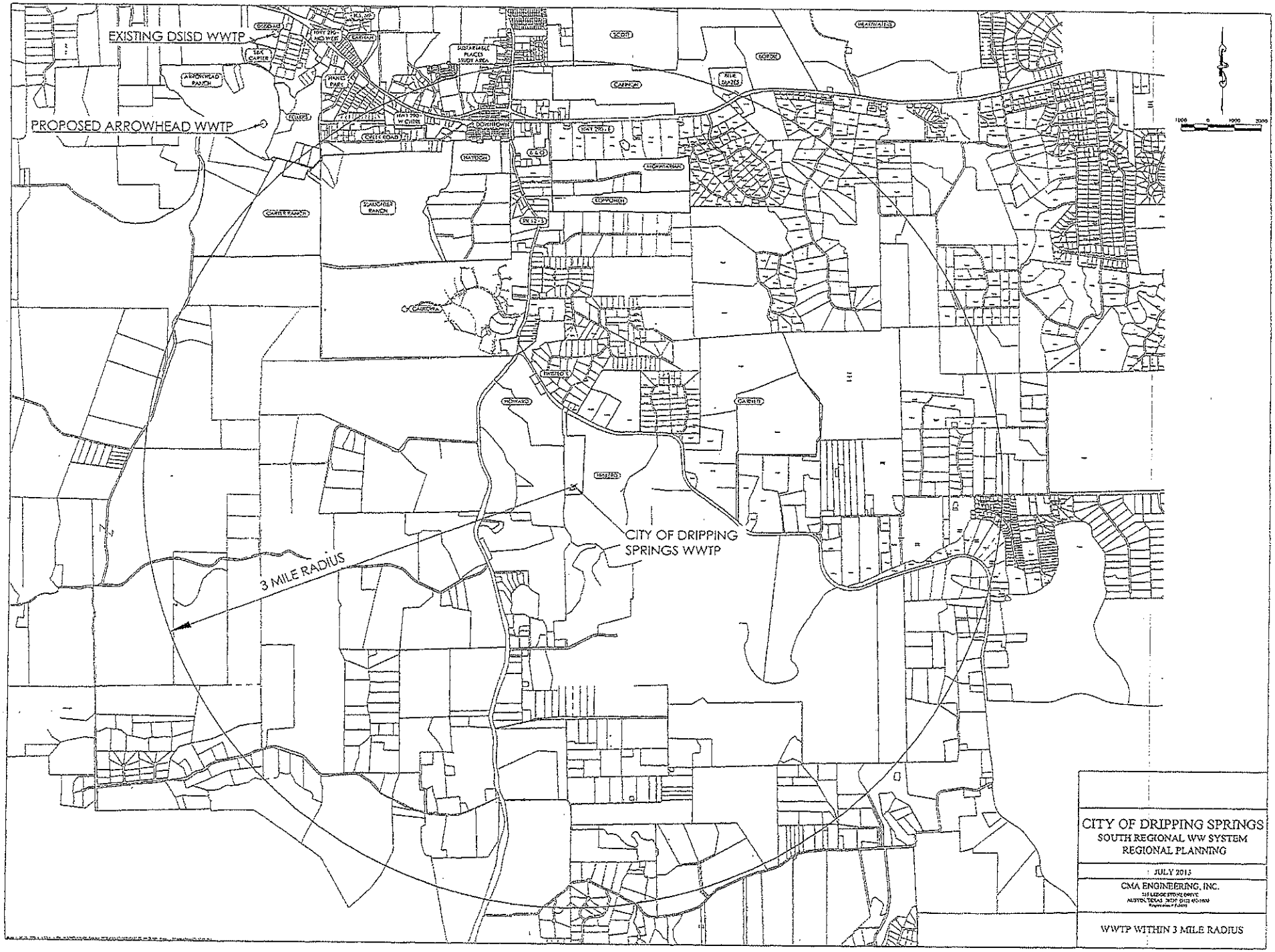
Response 2: The existing 333,000 gallon effluent holding tank is in service as part of the City's current land application permit number WQ0014488001. It is the intention of the City to use this tank for effluent storage as for future 30 TAC 210 Reuse. As mentioned in the Carollo Technical Memorandum No. 1, further evaluation will be required to evaluate if additional storage will be required.

If you have any questions or comments regarding these responses or application, please contact me at 512-432-1000.

Sincerely,

Robert P. Callegari, P.E.
Principal

Xc: Ginger Faught, City of Deputy City Administrator
Andy Barrett, Andy Barrett & Associates, PLLC
David Tuckfield, City of DS Wastewater Attorney
City Hall Public Viewing Binder


EXISTING DSISD WWTP
PROPOSED ARROWHEAD WWTP
CITY OF DRIPPING SPRINGS WWTP
3 MILE RADIUS
CITY OF DRIPPING SPRINGS
SOUTH REGIONAL WW SYSTEM
REGIONAL PLANNING
JULY 2015
CMA ENGINEERING, INC.
WWTP WITHIN 3 MILE RADIUS

Julian Centeno

From:	Julian Centeno
Sent:	Monday, July 11, 2016 3:40 PM
To:	Robby Callegari (rcallegari@cma-engineering.com)
Cc:	Firoj Vahora
Subject:	City of Dripping Springs, Application for New TPDES Permit No. WQ0014488003
Attachments:	Dripping Springs Attachment 1.pdf; Dripping Springs Attachment 2.pdf
Importance:	High

Robby,

As discussed last Friday, I am currently reviewing this application and would need clarification/additional information on the following:

1. Item 1(c)(3) on pages 21 and 22 of the technical report 1.1 (see Attachment 1): The applicant identified permitted wastewater facilities and/or collection systems within a three-mile radius of the proposed facility. To complete the response to this item, we need for you to please provide a list of these facilities and the reason why there is no need to contact these facilities.
2. Treatment Process Description (see Attachment 2): The application refers to the use of the existing effluent tank (cap 333,000 gal) for the Interim I and II phases with an additional effluent storage for the Final phase. Is there an estimate of the additional storage capacity for the Final phase?

Please provide a response by next week.

If you have any questions regarding these items, please give me a call at the number below.

Thank you.

Julian D. Centeno, Jr., P.E.

Municipal Permits Team
Wastewater Permitting Section (MC 148)
Water Quality Division
TCEQ

Tel. (512) 239-4608
Fax. (512) 239-4430

c. Regionalization of facilities

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

1. Municipally incorporated areas

If the applicant is a city, check N/A and proceed to 1(c)(2) below:

☒ N/A

Is any portion of the proposed service area located in an incorporated city?

☐ Yes ☐ No

If yes, within the city limits of:

_____

If yes, is correspondence from the city is attached?

☐ Yes ☐ No

If consent to provide service is available from the city, is justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached?

☐ Yes ☐ No

2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?

☐ Yes ☒ No

If yes, is justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion attached?

☐ Yes ☐ No

3. Nearby collection systems

Are there any domestic permitted wastewater treatment facilities and/or collection systems located within a three-mile radius of the proposed facility?

☒ Yes ☐ No

If yes, is a list of these facilities that includes the permittee's name and permit number, and an area map showing the location of these facilities attached?

☐ Yes ☒ No

If yes, are copies of your certified letters to these facilities **and** their response letters concerning connection with their system attached?

☐ Yes ☐ No

Does a permitted domestic wastewater treatment facility or a collection system located within three (3) miles of the proposed facility currently have the capacity or is willing to expand to accept the volume of wastewater proposed in this application?

☐ Yes ☒ No

If yes, is an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within 3 miles versus the cost of the proposed facility or expansion attached?

☐ Yes ☐ No

2. Proposed Organic Loading

(Instructions, Page 65)

a. New permits

Is this an application for a new permit?

☒ Yes ☐ No

If yes, proceed to 2(c).

If no, and the application is to amend an existing permit, provide organic loading information in 2(b).

b. Current organic loading

Facility Design Flow (flow being requested in application)

0.995 MGD

Average Influent Organic Strength or BOD_5 Concentration in mg/l

277 mg/L

Attachment 6

Treatment Process Description

The Interim I and Interim II Phase WWTP will be a four-stage Bardenpho activated sludge treatment system with conventional clarification and tertiary filtration followed by chlorine disinfection and will incorporate external carbon addition. Wastewater will pass through self-cleaning mechanical bar screens and enter the first anoxic basin, flow to the first aerobic basin, then to the second anoxic basin, and then to the second aerobic basin. Activated Sludge will flow from the second aerobic basin to the clarifier, then to the effluent filters, then to the chlorine contact chamber, and finally to the treated effluent tank. Treated effluent will be s stored in the holding tank prior to reuse or discharge. The WWTP will include a treated effluent pump station that will deliver treated water to the discharge point through a 12 in treated effluent line.

The Final Phase WWTP will include flow splitting and two identical four-stage Bardenpho activated sludge treatment systems with conventional clarification and tertiary filtration followed by chlorine disinfection and will incorporate external carbon addition.

It is anticipated that sludge will be hauled off-site, by a licensed hauler, to another permitted WWTP in the initial phases, and potentially dewatered onsite in future phases.

Table 1.4	Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.	
Blower capacity		
Type of blowers	-	Kaeser Tri-Lobe
Number of blowers	-	2
Capacity, each	scfm	1000
Firm blower capacity	scfm	1000
Return Activated Sludge Pumps		
Type of pumps	-	Airlift
Number of pumps	-	1
Capacity, each	inch	10
Waste Activated Sludge Pumps		
Type of pumps	-	Air lift
Number of pumps	-	2
Capacity, each	inch	4
Secondary Clarifier		
Number of clarifiers	-	1
Volume	cf	45,286
Diameter	ft	62
Surface area	sf	3,019
Side water depth	ft	15.5
Weir length	ft	185.4
Chlorine contact chamber		
Arc	Degrees	21
Treatment capacity	gpd	22,240
Effluent Holding Tank		
Volume	gal	333,000
Storage capacity	days	2 days at 162,5000 gpd
Aerobic Digestion		
Number of basins	-	2
Total Volume	gal	112,909
Inside Diameter	ft	62

and an assumed hauling capacity of 10,000 gallons per truck, the sludge hauling frequency under the proposed phasing ranges from once per 4 days (at 25% flow under Interim Phase I) to 2-3 trucks per day (100% flow under the Final Phase).

Preliminary and final design should therefore evaluate alternatives to meeting aerobic digester requirements, if desired. This could involve expansion of digestion capacity or the installation of a membrane thickening system inside of one of the aerobic digester basins. Membrane thickening allows to increase the solids concentration up to 2.5% total solids.

10.1.10 Effluent Storage and Pump Station

The current effluent storage is designed to provide for 48 hours of storage to meet the current 167,500 gpd land application permit for drip irrigation. Preliminary and final process design will need to evaluate if additional effluent storage capacity is required or recommended for future 30 TAC 210 Reuse Authorization. It is proposed that a treated effluent pump station will be constructed as part of the current City pending permit amendment.

10.1.11 Emergency Power Supply

The facility currently operates an emergency power generator to provide reliability for the commercial power service. The existing back-up power generator system will need to be expanded to handle the increased electrical loadings of the expanded facility for pumping, aeration, and disinfection while satisfying any additional requirements specified under TAC §217.36 and §217.37.

10.2 Proposed Expansion Phasing

Figure 1.13 shows the proposed facility expansion phasing to increase the BNR capacity for all Permit Phases. It is assumed that once pumped from the influent pumping station, water will flow by gravity through the secondary and tertiary treatment units.

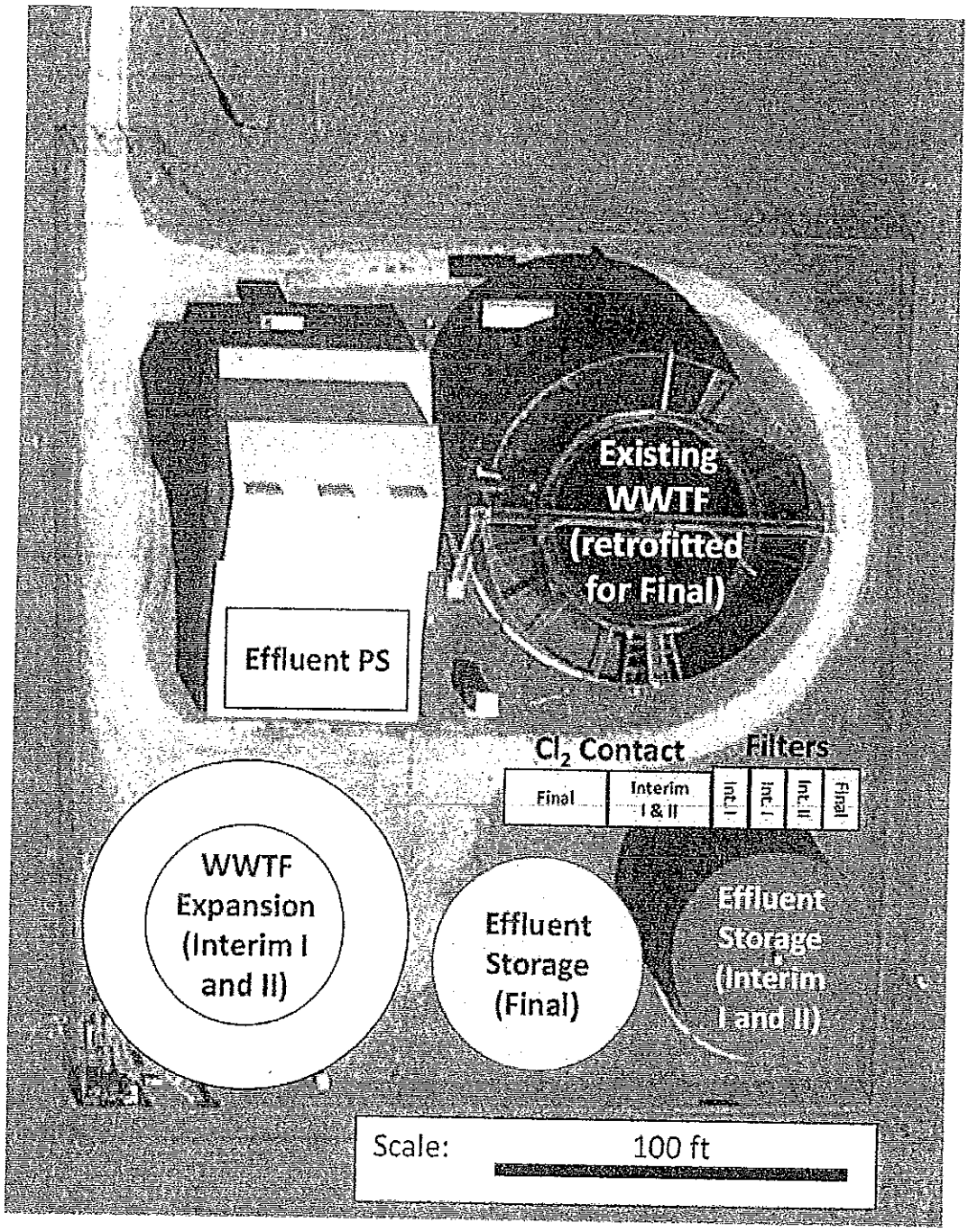
11.0 SUMMARY

The existing Bullseye treatment complex can be modified to accommodate a Four-stage Bardenpho treatment process with external carbon addition to achieve ultra-low nitrogen removal. This requires a rezoning of the existing aeration basins into anoxic and aerobic zones, implementation of MLR, and upgrades to the aeration diffuser and control system. External carbon addition will be necessary to remove sufficient nitrogen below 5 mg/L. Secondary treatment will be followed by tertiary chemical removal of P. As a conservative assumption this conceptual design assumed the addition of conventional downstream filters, recommending that alternative technologies be further evaluated during preliminary and final design. A new chlorine contact tank is proposed downstream of the tertiary filters to continue to maintain the required chlorine contact time prior to effluent discharge and/or

reuse. The design will also include new chemical feed facilities for alum or ferric for chemical P removal and external carbon addition for enhanced nitrogen removal.

Ancillary treatment systems will need to be expanded in order to accommodate the capacity increase as part of all Permit Phases, including influent pumping, headworks screens, blower capacity, backup power supply, electrical, instrumentation, and control systems, as well as effluent storage, chemical storage and feed systems.

The Interim I Phase of the BNR upgrades is designed for an ADMMF of 0.399 mgd. The Interim II and Final Phases will require the addition of a second treatment train unless a variance can be granted to the dual treatment unit for WWTPs over 400,000 gpd. No other variances were identified to be needed based on the proposed design and the published design criteria of 30 TAC Chapter 217. The Interim II and Final Phases were designed for a treatment capacity of 0.4975 mgd and 0.995 mgd, respectively. Phasing will be accomplished by construction of a second treatment train as described herein for Interim Phase I, which will be operated under Interim Phase II if and when the variance for a single-train WWTP over 400,000 gpd is granted. The existing treatment train will be retrofitted to match the new treatment train and both trains operated in parallel will constitute the Final Phase.



PROPOSED WASTEWATER TREATMENT FACILITY SITE PLAN WITH EXPANSION PHASING

FIGURE 1.13

CMA ENGINEERING, INC.
CITY OF DRIPPING SPRINGS CONCEPTUAL BNR DESIGN

Julian Centeno

From: James Miertschin <jm@jmaenv.com>
Sent: Thursday, December 17, 2015 2:58 PM
To: Julian Centeno
Cc: Andy Barrett; Ginger Faught; Robby Callegari; david@tuckfieldlaw.com
Subject: Dripping Springs TPDES Application #14488003
Attachments: ModelingM.pdf

Mr Centeno

I have been working with Robert Callegari on the Dripping Springs permit application. Attached to this email is a modeling memo that I prepared that describes the results of a QualTX modeling application. We would like for this memo to be added as a supplement to the City's permit application.

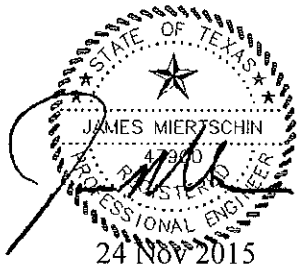
I will be happy to answer any questions that you might have.

James Miertschin
James Miertschin & Associates, Inc.

JAMES MIERTSCHIN & ASSOCIATES, INC.
ENVIRONMENTAL ENGINEERING (TX REG #F-2458)
P.O. BOX 162305 ° AUSTIN, TEXAS 78716-2305 ° (512) 327-2708

TECHNICAL MEMORANDUM

TO: **File**
FROM: **James Miertschin, PE, PhD**
Bruce Wiland, PE
DATE: **24 November 2015**
SUBJECT: **QUALTX Modeling Analysis,**
Proposed City of Dripping Springs Discharge



INTRODUCTION

The latest version of the QUALTX water quality model (v9.33) was applied for simulation of the potential impact of the proposed effluent discharge from the City of Dripping Springs upon dissolved oxygen in Onion Creek. QUALTX is the model usually applied by TCEQ modeling staff for assessment of effluent impacts, and other QUAL-based models are used in other states. It is a one-dimensional steady-state model, and it has been calibrated and applied to many watercourses.

The purpose of this Technical Memorandum is to document the approach and key assumptions employed in the modeling analysis.

At the outset of the study, a preliminary QUALTX model input file for Onion Creek was obtained from the TCEQ (Harrigan, 2013)[1]. TCEQ's modeling work was very preliminary at the time that it was provided. To a certain extent, the modeling analysis conducted as part of the current study was patterned after the TCEQ preliminary model. However, significantly more detail was placed into the current modeling analysis. TCEQ's preliminary model simulated Onion Creek from its headwaters all the way to the confluence with the Colorado River. For the present study, emphasis was placed upon the stream in the immediate vicinity of the discharge, with the simulation reach extending downstream to the recharge zone of the Edward's Aquifer.

PHYSICAL SETTING

A location map for the study area is shown in Figure 1. The portion of Onion Creek of interest is positioned south of the City of Dripping Springs. The area studied begins west of FM 12 and continues downstream past Hwy 150 near Driftwood.

[1] TCEQ, 2013. T.Harrigan, Modeling Team, via email.

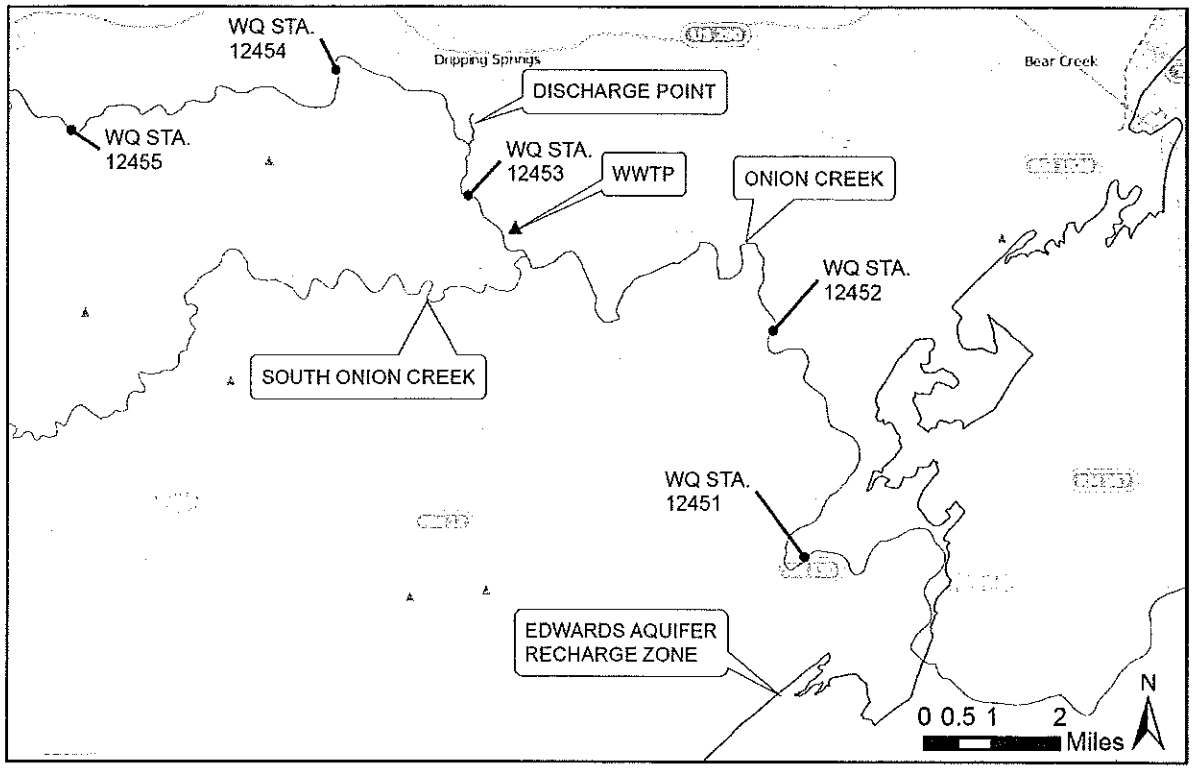


Figure 1 - Location Map

The proposed effluent discharge point will be located on Walnut Springs Creek, a small intermittent tributary of Onion Creek. Walnut Springs Creek is located within the Caliterra residential development that is currently under construction. From the discharge point, the effluent will flow approximately 0.43 miles to a confluence with Onion Creek. The tributary joins Onion Creek within an impounded reach, which will be referred to as Caliterra Pond. From the Caliterra Pond, water will flow downstream through a free-flowing reach before it enters into another impounded area. Much of the immediate discharge route is characterized by a series of impounded pools, interspersed with free-flowing reaches.

Access to Walnut Springs Creek and upper Onion Creek was available on the Caliterra subdivision property. Most of the Onion Creek reach passes through property without general public access, and there are relatively few public road crossings of Onion Creek below the discharge point.

BACKGROUND WATER QUALITY

Available water quality data for Onion Creek was compiled and analyzed. Pertinent to the modeling analysis, temperature, dissolved oxygen, biochemical oxygen demand, ammonia nitrogen, organic nitrogen, and chlorophyll-a were examined to determine background conditions. All of the data were extracted from the TCEQ's online database. The period of record downloaded covered the period 20 May 1981 through 23 June 2015 (TCEQ, 2015).[2]

[2] TCEQ, 2015. Online water quality database.

There are numerous monitoring locations on Onion Creek reported in the TCEQ's data base. Stations are available from the headwater area down to the confluence with the Colorado River. Many of the locations have a very limited number of data points. The present analysis focused upon the following stations that are located in the vicinity of the proposed discharge point, both upstream and downstream:

Pursley Road	Upstream of proposed discharge	St. No. 12455
Mt. Gainor Road	Upstream of proposed discharge	St. No. 12454
FM 12	Downstream of proposed discharge	St. No. 12453
FM 1856	Downstream of proposed discharge	St. No. 12452
Hwy 150	Downstream of proposed discharge	St. No. 12451

Of the preceding list, Station No. 12451 at Hwy 150 has a more extensive data base than the other stations selected. The data base at FM 1856 and FM 12 are very limited. The Pursley Road station is positioned upstream of the proposed discharge point, as is the Mt. Gainor Road station.

Temperature

The temperature data base was analyzed in order to determine summer characteristics for Onion Creek. Data for June through August were compiled for the five stations previously listed. Mt. Gainor and FM12 did not have any temperature data within this date range. The mean summer temperature for the selected data base was determined to be 27.243 C, with a standard deviation of 1.797 C. As a conservative estimate for summer temperature, the mean value plus one standard deviation was utilized: 29.04 C. Calculation of the critical temperature in this manner is consistent with TCEQ practice. This temperature was used for the QUALTX simulation of critical summer conditions. On Walnut Springs Creek, which will receive the proposed discharge, a critical temperature of 30.5 C was applied, a default value consistent with TCEQ practice.

Dissolved Oxygen

Dissolved oxygen data for the key stations was analyzed to determine the typical percent saturation value. First, available data pairs for temperature and dissolved oxygen were tabulated. Next, for each of the measured temperatures, the saturation concentration of dissolved oxygen was computed. Finally, the dissolved oxygen deficit was calculated as the ratio of the measured value to the theoretical saturation value.

Pursley Road	St. No. 12455	Avg DO 7.73 mg/L	Avg % Saturation 83.82
Mt. Gainor Road	St. No. 12454	Avg DO 7.38 mg/L	Avg % Saturation 83.81
FM 12	St. No. 12453	Avg DO 8.08 mg/L	Avg % Saturation 96.14
FM 1856	St. No. 12452	Avg DO 6.89 mg/L	Avg % Saturation 78.05
Hwy 150	St. No. 12451	Avg DO 8.42 mg/L	Avg % Saturation 92.86

For use in the modeling analysis, the percent saturation value upstream of the proposed discharge at Pursley Road was determined to be 83.82 %, and this value was applied in the modeling analysis to determine the headwater dissolved oxygen condition. At a critical summer temperature of 29.04 C, described previously, the dissolved oxygen saturation concentration is 7.686 mg/L. The percent saturation of 83.82 % represents a dissolved oxygen concentration of 6.44 mg/L at the critical stream temperature. In the modeling analysis, the headwater dissolved oxygen concentration was set at 6.44 mg/L in the first reach, and 6.0 mg/L in other tributary headwater flows, since their critical temperature was assumed to be 30.5 C, consistent with TCEQ practice.

Biochemical Oxygen Demand

Data for biochemical oxygen demand (BOD_5) were compiled. The only BOD_5 measurements available in the historical data base were taken at the station at Hwy 150 and analyzed by the USGS. The USGS has historically reported very low concentrations of BOD_5 in their data base, although the realistic level of detection is typically assumed to be approximately 2 mg/L. The mean BOD_5 for the data base was 1.24 mg/L. In the modeling analysis, a BOD_5 concentration of 1.3 mg/L was used for the headwater flows, consistent with TCEQ Standard Operating Procedures, since it is very close to the historical data value.

Ammonia Nitrogen

Ammonia data show that most measurements have historically been below detection limits at the various stations. The typical mean value is below detection limits, and the nominal detection limit in the database ranged from approximately 0.02 to 0.05 mg/L. For the modeling analysis, an ammonia nitrogen concentration of 0.05 mg/L was assumed for the various headwater flows within the study reach. This assumption is consistent with TCEQ Standard Operating Procedures.

Organic Nitrogen

Data for organic nitrogen are usually calculated as the difference between ammonia nitrogen and Total Kjeldahl Nitrogen. The Total Kjeldahl Nitrogen varied over a fairly large range in the database, with a mean value of 0.45 mg/L at Hwy 150 and a mean of 0.12 mg/L at Pursley Road.

For the modeling analysis, an organic nitrogen concentration of 0.5 mg/L was assumed for the headwater flows, consistent with TCEQ Standard Operating Procedures.

Chlorophyll-a

Data for chlorophyll-a were also available in the selected data set. The mean value at the Hwy 150 station was approximately 4.9 µg/L (with values below the detection limit averaged as the limit). Upstream at the Mt. Gainor Road station, a mean value of 1.5 µg/L was determined, although all but one reading fell below detection limits. In the modeling analysis, a chlorophyll-a concentration of 2 µg/L was applied to each reach to represent algal activity. The model was executed both with and without this assumption.

SEGMENTATION

The model was segmented to incorporate observed pools and free-flowing reaches. The primary reach of interest extends from just above the proposed discharge point down to approximately the recharge zone, located downstream of Hwy 150. The total reach of interest spans approximately 20 miles. To a certain extent, the segmentation was similar to the segmentation employed by TCEQ in a preliminary modeling analysis; however, for the present study, additional attention was applied to the simulation of the pools.

The proposed discharge will be released into Walnut Springs Creek, a small tributary of Onion Creek located on the Caliterra property. The effluent will flow approximately 0.43 miles before a confluence with Onion Creek. At the confluence point with Onion Creek, the tributary will flow into the Caliterra pond.

The model segmentation is illustrated in Figure 2. A total of 62 reaches were established and simulated in the model. The uppermost reach is the headwater of the Caliterra Pond, beginning at km 99.0. The lowermost reach is a pool that extends to the confluence with York Creek, ending at km 67.2. The total distance simulated is therefore 31.8 km. For most of the reaches, a computational element length of 0.1 km was utilized. For Walnut Springs Creek, a 0.01 km element length was applied in order to obtain more resolution for the tributary and to recognize that the tributary is narrower than most of the reaches on Onion Creek.

DAMS AND FALLS

Particularly in the vicinity of the proposed discharge, there are many small dams that have created pools on Onion Creek. These dams were used to demarcate the ending point of specific pools in the model segmentation. For use in the modeling analysis, the dam height was estimated from data available from a recent HEC-RAS floodplain study conducted on Onion Creek[3]. The QUALTX model includes the capability to simulate reaeration associated with water flowing over a dam, and this feature requires the fall height for the computation.

Similarly, there is a small waterfall on Walnut Springs Creek that was simulated in the model. This fall height was used to calculate reaeration in the same manner as described above.

[3] Halff, 2012. Corps of Engineers Feasibility Study - Hays County Phase 1A

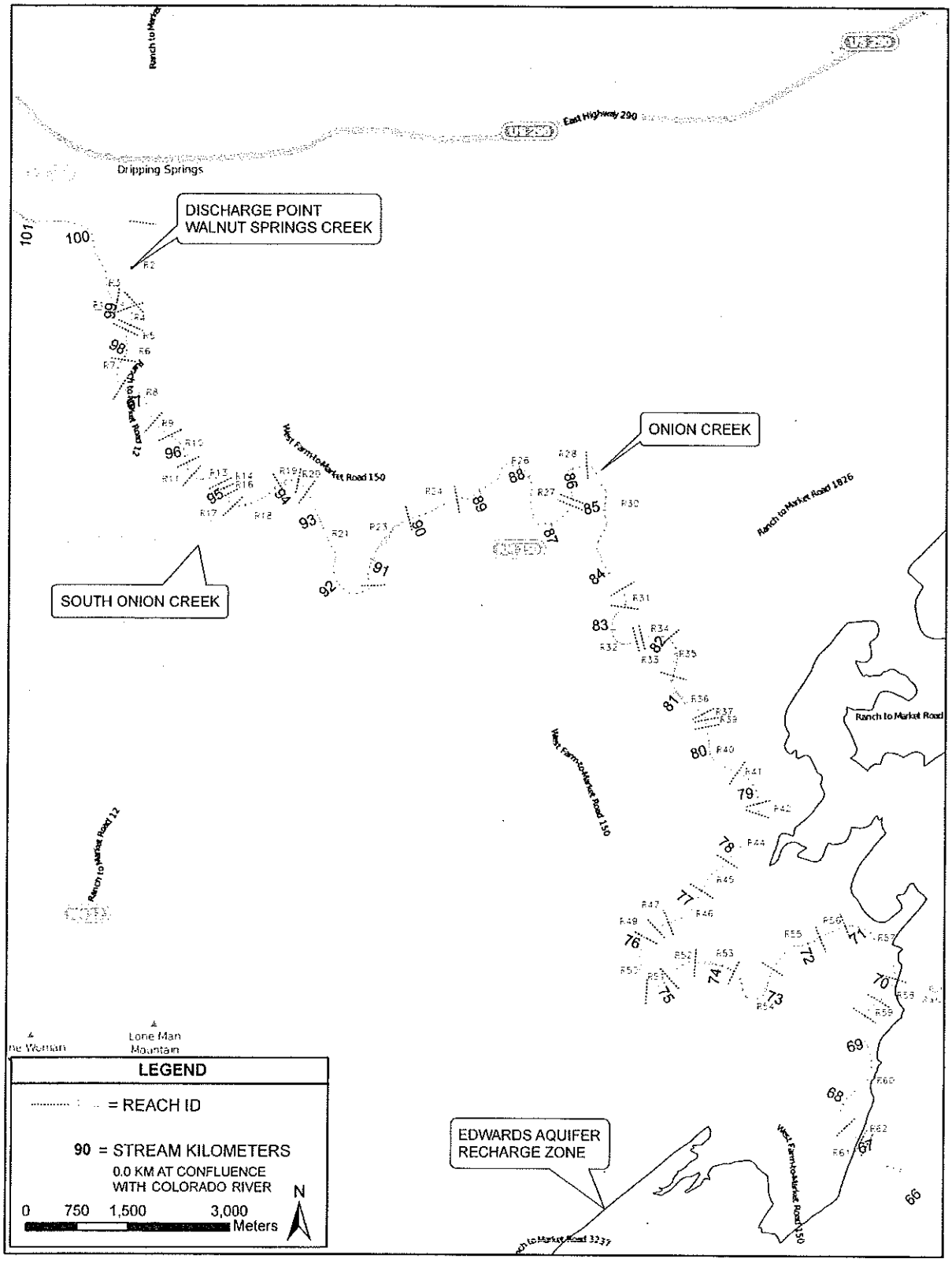


Figure 2 - Segmentation

HEADWATER FLOWS

The closest USGS streamflow station is located at Hwy 150, several miles below the proposed discharge point and the numerous pools and dams that describe the reach. For the USGS station at Hwy 150 near Driftwood, a mean streamflow rate of 6.4 cfs and a median flow of 1.2 cfs have been calculated based on 36 years of record (USGS, 2015). At this same station, the TCEQ has published a critical low flow (7Q2) value of 0.19 cfs (TCEQ, 2010)[4]. There is no USGS flow measurement station located upstream of the proposed discharge point, therefore, there are no data available for calculation of a 7-day 2-yr low flow value on upper Onion Creek.

The summer of 2015 was exceptionally dry for the area near Dripping Springs. Streamflow was measured on Onion Creek in the vicinity of the proposed discharge point on several occasions. The observed streamflow values ranged from 0.3 to 0.6 cubic feet per second in Onion Creek, below what is known as the Caliterra Pond. Therefore, for the purposes of the present study, a value of 0.3 cfs was used to represent the critical low flow for the upper reach of the modeling segment.

Walnut Springs Creek was observed to be dry in the vicinity of the proposed discharge point. On one occasion, a small amount of flow was observed in the very upper end, but it disappeared shortly downstream. For Walnut Springs Creek then, a critical low flow of 0.0 cfs will be used.

REAERATION

For flowing reaches in the modeling analysis, the TCEQ's Texas Equation was applied, which calculates a reaeration rate based upon velocity and depth. For pooled reaches, the reaeration coefficient was calculated as K_L/depth. This equation is used by TCEQ for small ponds which fall outside of the depth and velocity ranges appropriate for the Texas Equation. The TCEQ recommends a value of K_L = 1.0 meter/day for inland waters.

DISPERSION

Dispersion is a process that effects the distribution of constituents. For the present study, the effects of dispersion would potentially be important for primarily the pooled reaches. As a result, a dispersion coefficient of 0.15 m^2/sec was used in the modeling analysis. This value is within the range of typical dispersion coefficients published with the QUALTX Users Manual[5] for small streams. It is toward the upper end of the range because dispersion becomes a more important factor in streams that have slow velocities.

KINETIC RATES

There are a couple of kinetic rate coefficients that are important in the modeling analysis. First, the BOD_5 decay rate must be specified. For the present study, a rate of 0.1/d was used. This rate should be appropriate, given the very low BOD_5 values expected in the proposed discharge.

---

[4] TCEQ, 2010. Procedures to Implement the Texas Surface Water Quality Standards

[5] Wiland, B, 2014. QUALTX for Windows Users Manual, prepared for TCEQ

Another kinetic rate coefficient is the nitrification rate. For the present study, a rate of 0.3/d was used. This rate is probably an overestimate, given the very low ammonia nitrogen values expected in the proposed discharge. Both the BOD_5 decay rate and the ammonia decay rate are consistent with TCEQ Standard Operating Procedures for modeling.

SEDIMENT OXYGEN DEMAND

Sediment Oxygen Demand (SOD) is an important parameter in the dissolved oxygen budget for a watercourse. In the vicinity of the proposed discharge, Onion Creek features primarily a solid limestone bottom in the pool areas, and large stones and gravel in flowing reaches. There is very little evidence of any solids deposition in most reaches. As a result, the SOD is expected to be very low in the immediate study reach. For the modeling analysis, an SOD value of 0.1 g O_2/m^2/day (at 20 °C) was used.

CHLOROPHYLL-A

Chlorophyll-a is sometimes used in the dissolved oxygen budget modeling process, with the assumption that photosynthetic activity provides a net gain in dissolved oxygen. A nominal concentration of chlorophyll-a was used in one version of the present modeling analysis: 2 µg/L. (Two different input files were developed to allow simulation with and without chlorophyll-a.)

PROPOSED DISCHARGE

The proposed discharge from the City of Dripping Springs was input into the modeling analysis as a flow of 0.995 MGD. Effluent quality was assumed to be 5 mg/L BOD_5 and 2 mg/L ammonia nitrogen. An effluent dissolved oxygen of 6 mg/L was assumed.

RESULTS

The QUALTX model for Onion Creek was run to determine the potential impacts of the proposed Dripping Springs discharge upon dissolved oxygen. To accomplish this objective, the model is run under critical conditions of summer high temperature and low streamflow, with the assumption that the proposed ultimate permit effluent flowrate is discharged.

The results of the modeling analysis are shown in Figure 3, which is a plot of dissolved oxygen in the vicinity of the discharge. It can be observed that the lowest projected dissolved oxygen occurs in the lower Caliterra Pond, with a value of 4.87 mg/L. This projected dissolved oxygen is judged to demonstrate compliance with the assumed dissolved oxygen criterion of 5 mg/L, as TCEQ normally assumes a departure of 0.2 mg/L as compliant.

Figure 4 displays the predicted dissolved oxygen concentration throughout the entire study reach. The predicted dissolved oxygen generally remains within the range of 6.0 - 8.0 mg/L.

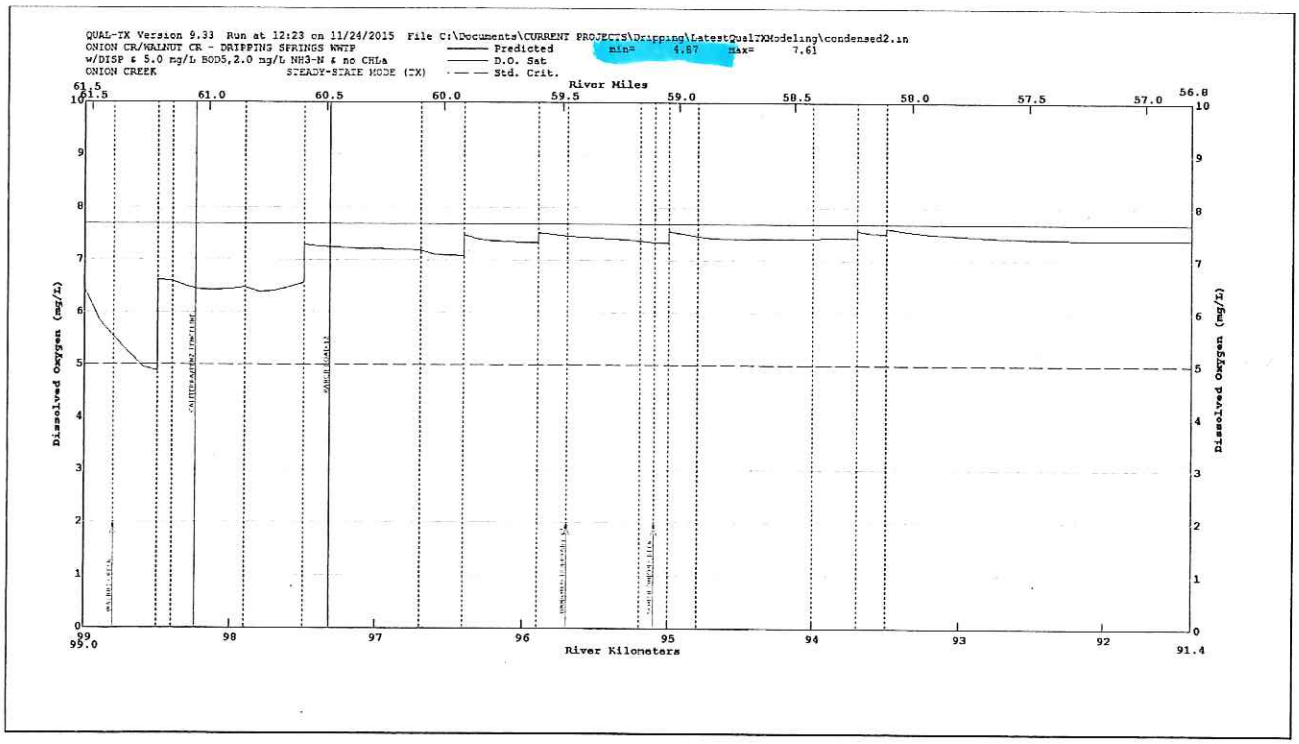


Figure 3 - Predicted Dissolved Oxygen near Discharge

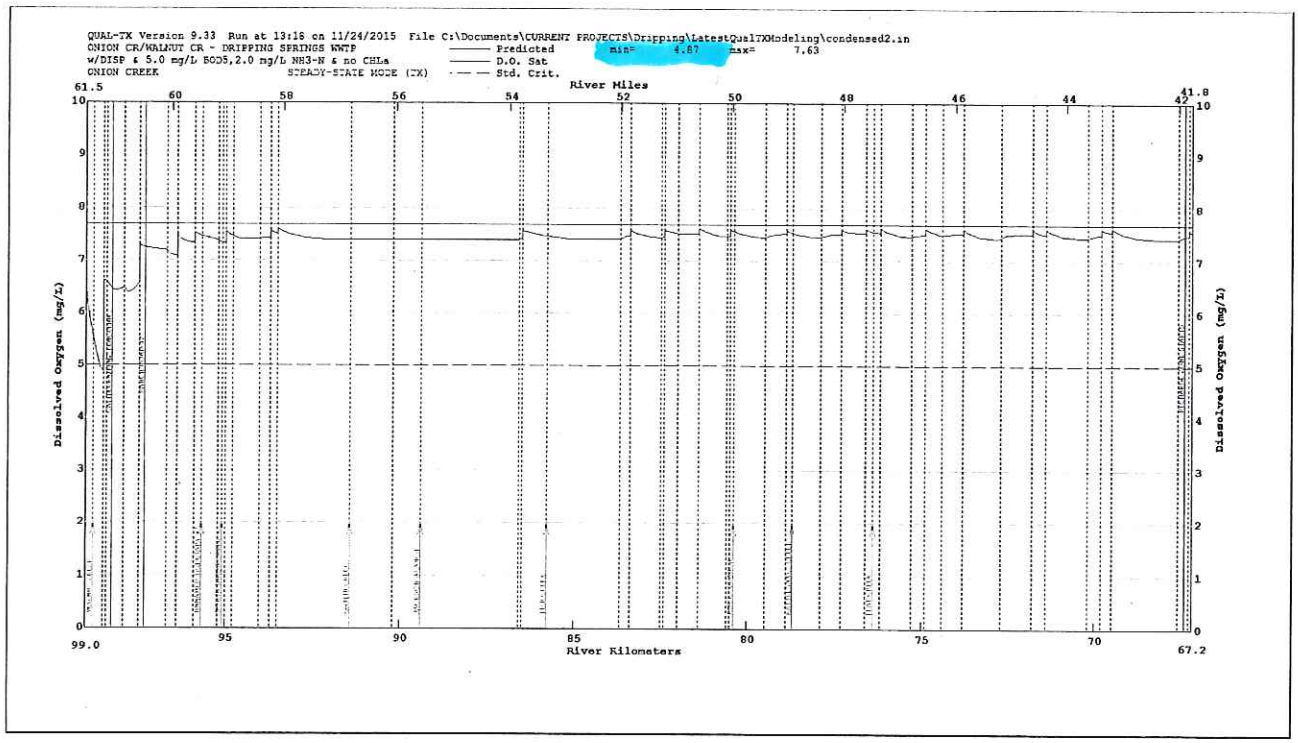


Figure 4 - Predicted Dissolved Oxygen, Entire Study Reach

The results change if chlorophyll-a is simulated as part of the dissolved oxygen budget. With chlorophyll-a simulated at a nominal concentration of 2 μg/L, the minimum dissolved oxygen is predicted to be 5.04 mg/L within the lower Caliterra Pond, as shown in Figure 5.

A QUALTX input file for the simulation of dissolved oxygen without chlorophyll-a is provided in Appendix A. A similar input file that includes chlorophyll-a is provided in Appendix B.

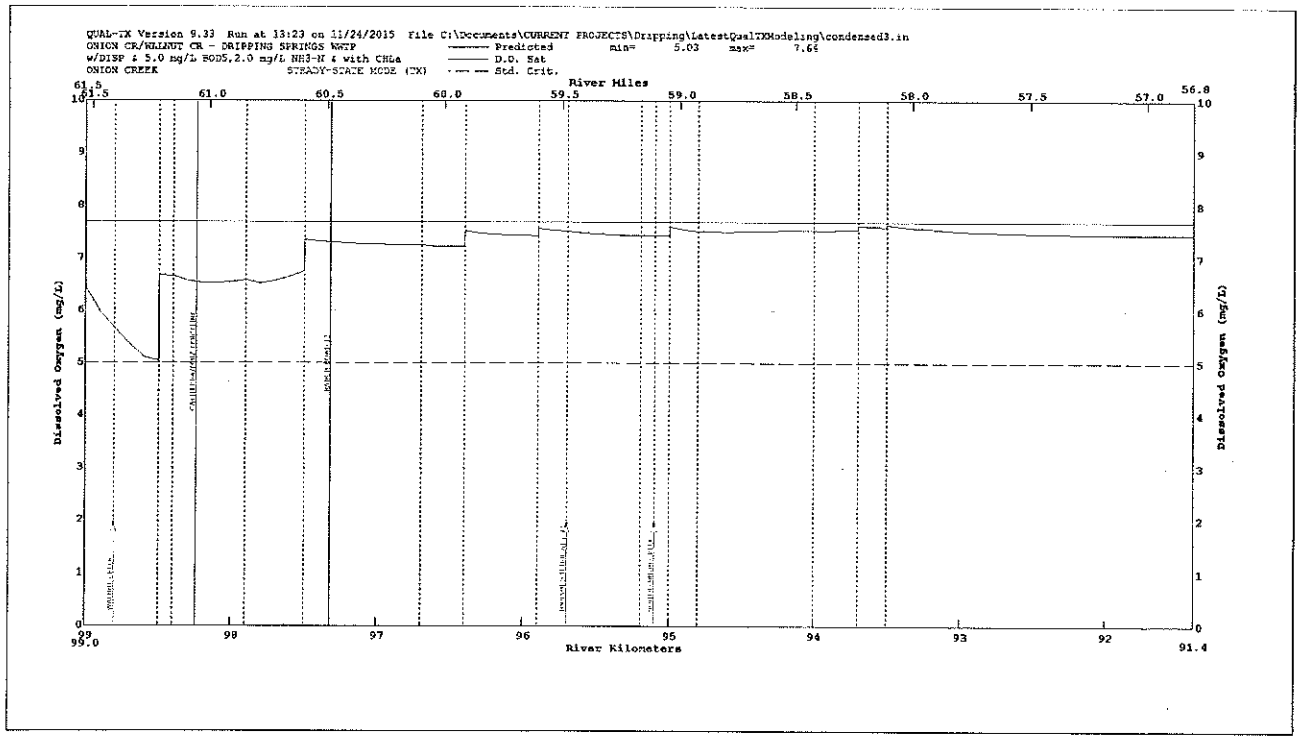


Figure 5 - Predicted Dissolved Oxygen near Discharge, with Chlorophyll-a

APPENDIX A

```
!--------1---------2---------3---------4---------5---------6---------7---------8---------9---------0---------1---------2---------3---------4---------5
!2345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890
CNTROL01      ONION CR/WALNUT CR - DRIPPING SPRINGS WWTP
CNTROL02      w/DISP & 5.0 mg/L BOD5,2.0 mg/L NH3-N & no CHLa
CNTROL12 YES METRIC UNITS
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I = CHLORIDES                    IN MG/L
MODOPT04  NO CONSERVATIVE MATERIAL II =                              IN
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =                              IN
ENDATA02
PROGRAM  HYDRAULIC CALCULATION METHOD       = 2.
PROGRAM  SETTLING RATE UNITS                = 2.
PROGRAM  BOD OXYGEN UPTAKE RATE             = 2.3
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID    1. OC UPPER CALITERRA POND                99.0      98.8    0.10
REACH ID    2. WA WALNUT CREEK-ROAD TO FALLS           1.65      0.1    0.01
REACH ID    3. WA WALNUT CREEK-FALLS TO MOUTH          0.1       0.0    0.01
REACH ID    4. OC LOWER CALITERRA POND                98.8      98.5    0.10
REACH ID    5. OC CALITERRA POND TO PENZ POND         98.5      98.4    0.10
REACH ID    6. OC UPPER PENZ POND                     98.4      97.9    0.10
REACH ID    7. OC LOWER PENZ POND                     97.9      97.5    0.10
REACH ID    8. OC PENZ POND TO POND E                 97.5      96.7    0.10
REACH ID    9. OC POND A                              96.7      96.4    0.10
REACH ID   10. OC POND B                              96.4      95.9    0.10
REACH ID   11. OC POND B TO UNNAMED TRIB 5            95.9      95.7    0.10
REACH ID   12. U4 UNNAMED TRIBUTARY #5                 0.01      0.0    0.01
REACH ID   13. OC UNNAMED TRIB 5 TO POND C            95.7      95.2    0.10
REACH ID   14. OC UPPER POOL C (ABOVE S ONION CR)     95.2      95.1    0.10
REACH ID   15. SO SOUTH ONION CREEK                    0.01      0.0    0.01
REACH ID   16. OC LOWER POOL C (BELOW S ONION CR)     95.1      95.0    0.10
REACH ID   17. OC POOL C TO POOL D                    95.0      94.8    0.10
REACH ID   18. OC POOL D                              94.8      94.0    0.10
REACH ID   19. OC POOL E                              94.0      93.7    0.10
REACH ID   20. OC POOL F                              93.7      93.5    0.10
REACH ID   21. OC POOL F TO GATLIN CR                 93.5      91.4    0.10
REACH ID   22. GA GATLIN CREEK                        0.01      0.0    0.01
REACH ID   23. OC GATLIN CREEK TO FM 150              91.4      90.2    0.10
REACH ID   24. OC FM 150 TO JACKSON BRANCH           90.2      89.4    0.10
REACH ID   25. JA JACKSON BRANCH                      0.01      0.0    0.01
REACH ID   26. OC JACKSON BRANCH TO POND G           89.4      86.6    0.10
REACH ID   27. OC POND G                             86.6      86.5    0.10
REACH ID   28. OC POND G TO PIER BRANCH              86.5      85.8    0.10
REACH ID   29. PI PIER BRANCH                        0.01      0.0    0.01
REACH ID   30. OC PIER BRANCH TO POOL H              85.8      83.7    0.10
REACH ID   31. OC POOL H                             83.7      83.4    0.10
REACH ID   32. OC POOL H TO POOL I                   83.4      82.5    0.10
REACH ID   33. OC POOL I                             82.5      82.4    0.10
REACH ID   34. OC POOL I TO POOL J                   82.4      82.0    0.10
REACH ID   35. OC POOL J                             82.0      81.4    0.10
REACH ID   36. OC POOL J TO POOL K                   81.4      80.6    0.10
REACH ID   37. OC POOL K                             80.6      80.5    0.10
REACH ID   38. OC POOL K TO ROCKY BRANCH             80.5      80.4    0.10
REACH ID   39. RO ROCKY BRANCH                       0.01      0.0    0.01
REACH ID   40. OC ROCKY BRANCH TO POOL L             80.4      79.5    0.10
REACH ID   41. OC POOL L                             79.5      78.9    0.10
REACH ID   42. OC POOL L TO RATTLESNAKE CR           78.9      78.7    0.10
REACH ID   43. RA RATTLESNAKE CREEK                  0.01      0.0    0.01
REACH ID   44. OC RATTLESNAKE CR TO POOL M           78.7      77.9    0.10
REACH ID   45. OC POOL M                             77.9      77.3    0.10
REACH ID   46. OC POOL N                             77.3      76.6    0.10
REACH ID   47. OC UPPER POOL O (ABV FLAT CREEK)      76.6      76.4    0.10
REACH ID   48. FL FLAT CREEK                         0.01      0.0    0.01
REACH ID   49. OC LOWER POOL O (BLW FLAT CREEK)      76.4      76.2    0.10
REACH ID   50. OC POOL O TO POOL P                   76.2      75.3    0.10
REACH ID   51. OC POOL P                             75.3      74.9    0.10
REACH ID   52. OC POOL P TO POOL Q                   74.9      74.4    0.10
REACH ID   53. OC POOL Q                             74.4      73.8    0.10
REACH ID   54. OC POOL Q TO POOL R                   73.8      72.7    0.10
REACH ID   55. OC POOL R                             72.7      71.8    0.10
REACH ID   56. OC POOL S                             71.8      71.4    0.10
REACH ID   57. OC POOL S TO POOL T                   71.4      70.2    0.10
REACH ID   58. OC POOL T                             70.2      69.8    0.10
REACH ID   59. OC POOL U                             69.8      69.5    0.10
REACH ID   60. OC POOL U TO POOL V                   69.5      67.6    0.10
REACH ID   61. OC POOL V                             67.6      67.3    0.10
REACH ID   62. OC POOL V TO YORKS CREEK              67.3      67.2    0.10
ENDATA08
!                    a      b      c      d      e      f
!                WIDTH WIDTH  WIDTH  DEPTH  DEPTH  DEPTH
!          R#    COEFF  EXP    CONST  COEFF   EXP    CONST  SLOPE  MANNING EVAP
!         *** f--------*******--------*******--------*******--------*******--------
!start of Upper Caliterra Pond at Pedestrian Bridge/Dam
HYDR-1      1.   0.000  0.100 24.640  0.000  0.400  1.180   0.000
!start of Walnut Creek
HYDR-1      2.   4.420  0.100  0.000  0.520  0.400  0.000   0.000
HYDR-1      3.   4.420  0.100  0.000  0.520  0.400  0.000   0.000
!end of Walnut Creek (mouth)
HYDR-1      4.   0.000  0.100 23.680  0.000  0.400  1.670   0.000
!end of Lower Caliterra Pond/Dam
HYDR-1      5.  37.410  0.100  0.000  0.980  0.400  0.000   0.000
!start of Penz Pond
HYDR-1      6.   0.000  0.100 13.870  0.000  0.400  0.880   0.000
HYDR-1      7.   0.000  0.100 21.810  0.000  0.400  1.450   0.000
!end of Penz Pond
HYDR-1      8.  20.610  0.100  0.000  0.980  0.400  0.000   0.000
HYDR-1      9.   0.000  0.100 20.620  0.000  0.400  1.480   0.000
HYDR-1     10.   0.000  0.100 16.250  0.000  0.400  0.870   0.000
HYDR-1     11.  14.760  0.100  0.000  0.980  0.400  0.000   0.000
HYDR-1     12.  10.602  0.100  0.000  0.720  0.400  0.000   0.000
HYDR-1     13.  13.510  0.100  0.000  0.980  0.400  0.000   0.000
HYDR-1     14.   0.000  0.100 25.270  0.000  0.400  1.230   0.000
```

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HYDR-1     15.  10.602  0.100  0.000  0.720  0.400  0.000  0.000
HYDR-1     16.   0.000  0.100 25.270  0.000  0.400  1.230  0.000
HYDR-1     17.  22.310  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     18.   0.000  0.100 20.310  0.000  0.400  0.960  0.000
HYDR-1     19.   0.000  0.100 12.720  0.000  0.400  0.960  0.000
HYDR-1     20.   0.000  0.100 16.690  0.000  0.400  0.960  0.000
HYDR-1     21.  17.210  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     22.  10.602  0.100  0.000  0.720  0.400  0.000  0.000
HYDR-1     23.  14.270  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     24.  11.900  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     25.  10.602  0.100  0.000  0.720  0.400  0.000  0.000
HYDR-1     26.  13.890  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     27.   0.000  0.100 14.400  0.000  0.400  0.960  0.000
HYDR-1     28.  12.050  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     29.  10.602  0.100  0.000  0.720  0.400  0.000  0.000
HYDR-1     30.  21.960  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     31.   0.000  0.100 22.200  0.000  0.400  0.760  0.000
HYDR-1     32.  19.250  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     33.   0.000  0.100 16.080  0.000  0.400  0.960  0.000
HYDR-1     34.  10.120  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     35.   0.000  0.100 14.670  0.000  0.400  1.220  0.000
HYDR-1     36.  18.200  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     37.   0.000  0.100 10.270  0.000  0.400  0.960  0.000
HYDR-1     38.  17.220  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     39.  10.602  0.100  0.000  0.720  0.400  0.000  0.000
HYDR-1     40.  18.040  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     41.   0.000  0.100 19.880  0.000  0.400  0.440  0.000
HYDR-1     42.  16.270  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     43.  10.602  0.100  0.000  0.720  0.400  0.000  0.000
HYDR-1     44.  14.950  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     45.   0.000  0.100 18.870  0.000  0.400  0.730  0.000
HYDR-1     46.   0.000  0.100 20.650  0.000  0.400  0.770  0.000
HYDR-1     47.   0.000  0.100 20.820  0.000  0.400  1.030  0.000
HYDR-1     48.  10.602  0.100  0.000  0.720  0.400  0.000  0.000
HYDR-1     49.   0.000  0.100 20.620  0.000  0.400  1.030  0.000
HYDR-1     50.  19.480  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     51.   0.000  0.100 21.940  0.000  0.400  0.960  0.000
HYDR-1     52.  17.220  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     53.   0.000  0.100 17.460  0.000  0.400  0.420  0.000
HYDR-1     54.  30.040  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     55.   0.000  0.100 37.500  0.000  0.400  1.560  0.000
HYDR-1     56.   0.000  0.100 17.740  0.000  0.400  0.960  0.000
HYDR-1     57.  21.220  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     58.   0.000  0.100 18.850  0.000  0.400  0.960  0.000
HYDR-1     59.   0.000  0.100 17.250  0.000  0.400  0.870  0.000
HYDR-1     60.  21.060  0.100  0.000  0.980  0.400  0.000  0.000
HYDR-1     61.   0.000  0.100 21.110  0.000  0.400  0.690  0.000
HYDR-1     62.  22.354  0.100  0.000  1.226  0.400  0.000  0.000
ENDATA09
!          R#  RANGE    a         b         c         d
!         ***  -----*********----------*********----------
HYDR-2      1.  0.00     0.15        0.0       0.0       0.0
HYDR-2      4.  0.00     0.15        0.0       0.0       0.0
HYDR-2      9.  0.00     0.15        0.0       0.0       0.0
HYDR-2     10.  0.00     0.15        0.0       0.0       0.0
HYDR-2     14.  0.00     0.15        0.0       0.0       0.0
HYDR-2     16.  0.00     0.15        0.0       0.0       0.0
HYDR-2     18.  0.00     0.15        0.0       0.0       0.0
HYDR-2     19.  0.00     0.15        0.0       0.0       0.0
HYDR-2     20.  0.00     0.15        0.0       0.0       0.0
HYDR-2     27.  0.00     0.15        0.0       0.0       0.0
HYDR-2     31.  0.00     0.15        0.0       0.0       0.0
HYDR-2     33.  0.00     0.15        0.0       0.0       0.0
HYDR-2     35.  0.00     0.15        0.0       0.0       0.0
HYDR-2     37.  0.00     0.15        0.0       0.0       0.0
HYDR-2     41.  0.00     0.15        0.0       0.0       0.0
HYDR-2     45.  0.00     0.15        0.0       0.0       0.0
HYDR-2     46.  0.00     0.15        0.0       0.0       0.0
HYDR-2     47.  0.00     0.15        0.0       0.0       0.0
HYDR-2     49.  0.00     0.15        0.0       0.0       0.0
HYDR-2     51.  0.00     0.15        0.0       0.0       0.0
HYDR-2     53.  0.00     0.15        0.0       0.0       0.0
HYDR-2     55.  0.00     0.15        0.0       0.0       0.0
HYDR-2     56.  0.00     0.15        0.0       0.0       0.0
HYDR-2     58.  0.00     0.15        0.0       0.0       0.0
HYDR-2     59.  0.00     0.15        0.0       0.0       0.0
HYDR-2     61.  0.00     0.15        0.0       0.0       0.0
ENDATA10
!          R#   TEMP    SALINITY   DO      NH3-N  NO3-N    PO4-P   CHL A   PERIP   BOD1    BOD2    ORG-N   ORG-P   COLI    NCM     CM-I    CM-II
!         ***  --------********--------********---------********--------********--------********--------********--------********--------********
INITIAL     1.   29.04              6.0      0.02    0.00
!start Walnut Creek
INITIAL     2.   30.5               6.0      0.02    0.00
INITIAL     3.   30.5               6.0      0.02    0.00
!end Walnut Creek
INITIAL     4.   29.04              6.0      0.02    0.00
INITIAL     5.   29.04              6.0      0.02    0.00
INITIAL     6.   29.04              6.0      0.02    0.00
INITIAL     7.   29.04              6.0      0.02    0.00
INITIAL     8.   29.04              6.0      0.02    0.00
INITIAL     9.   29.04              6.0      0.02    0.00
INITIAL    10.   29.04              6.0      0.02    0.00
INITIAL    11.   29.04              6.0      0.02    0.00
INITIAL    12.   30.5               6.0      0.02    0.00
INITIAL    13.   29.04              6.0      0.02    0.00
INITIAL    14.   29.04              6.0      0.02    0.00
INITIAL    15.   30.5               6.0      0.02    0.00
INITIAL    16.   29.04              6.0      0.02    0.00
INITIAL    17.   29.04              6.0      0.02    0.00
INITIAL    18.   29.04              6.0      0.02    0.00
INITIAL    19.   29.04              6.0      0.02    0.00
INITIAL    20.   29.04              6.0      0.02    0.00
INITIAL    21.   29.04              6.0      0.02    0.00
INITIAL    22.   30.5               6.0      0.02    0.00
INITIAL    23.   29.04              6.0      0.02    0.00
INITIAL    24.   29.04              6.0      0.02    0.00
INITIAL    25.   30.5               6.0      0.02    0.00
INITIAL    26.   29.04              6.0      0.02    0.00
INITIAL    27.   29.04              6.0      0.02    0.00
INITIAL    28.   29.04              6.0      0.02    0.00
INITIAL    29.   30.5               6.0      0.02    0.00
INITIAL    30.   29.04              6.0      0.02    0.00
INITIAL    31.   29.04              6.0      0.02    0.00
INITIAL    32.   29.04              6.0      0.02    0.00
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INITIAL    33.   29.04            6.0     0.02    0.00
INITIAL    34.   29.04            6.0     0.02    0.00
INITIAL    35.   29.04            6.0     0.02    0.00
INITIAL    36.   29.04            6.0     0.02    0.00
INITIAL    37.   29.04            6.0     0.02    0.00
INITIAL    38.   29.04            6.0     0.02    0.00
INITIAL    39.   30.5             6.0     0.02    0.00
INITIAL    40.   29.04            6.0     0.02    0.00
INITIAL    41.   29.04            6.0     0.02    0.00
INITIAL    42.   29.04            6.0     0.02    0.00
INITIAL    43.   30.5             6.0     0.02    0.00
INITIAL    44.   29.04            6.0     0.02    0.00
INITIAL    45.   29.04            6.0     0.02    0.00
INITIAL    46.   29.04            6.0     0.02    0.00
INITIAL    47.   29.04            6.0     0.02    0.00
INITIAL    48.   30.5             6.0     0.02    0.00
INITIAL    49.   29.04            6.0     0.02    0.00
INITIAL    50.   29.04            6.0     0.02    0.00
INITIAL    51.   29.04            6.0     0.02    0.00
INITIAL    52.   29.04            6.0     0.02    0.00
INITIAL    53.   29.04            6.0     0.02    0.00
INITIAL    54.   29.04            6.0     0.02    0.00
INITIAL    55.   29.04            6.0     0.02    0.00
INITIAL    56.   29.04            6.0     0.02    0.00
INITIAL    57.   29.04            6.0     0.02    0.00
INITIAL    58.   29.04            6.0     0.02    0.00
INITIAL    59.   29.04            6.0     0.02    0.00
INITIAL    60.   29.04            6.0     0.02    0.00
INITIAL    61.   29.04            6.0     0.02    0.00
INITIAL    62.   29.04            6.0     0.02    0.00
ENDATA11
!            REARC    a       b       c          BOD1    BOD1    SETT    BOD1    BOD2    BOD2    SETT    BOD2    BOD2
!       R#    EQN     K2      K2      K2    SOD  DECAY   SETT    AVAIL   ANAER   DECAY   SETT    AVAIL   ANAER   HYDR
!      ***   -----*******-------*******-------********-------********-------********-------********-------********-------********
COEF-1      1.   20.  1.000              0.10    0.1     0.0     1.0     0.10
!start Walnut Creek
COEF-1      2.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1      3.   11.                    0.10    0.1     0.0     1.0     0.10
!end Walnut Creek
COEF-1      4.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1      5.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1      6.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1      7.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1      8.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1      9.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     10.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     11.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     12.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     13.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     14.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     15.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     16.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     17.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     18.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     19.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     20.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     21.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     22.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     23.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     24.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     25.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     26.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     27.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     28.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     29.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     30.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     31.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     32.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     33.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     34.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     35.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     36.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     37.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     38.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     39.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     40.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     41.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     42.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     43.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     44.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     45.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     46.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     47.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     48.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     49.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     50.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     51.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     52.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     53.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     54.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     55.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     56.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     57.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     58.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     59.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     60.   11.                    0.10    0.1     0.0     1.0     0.10
COEF-1     61.   20.  1.000              0.10    0.1     0.0     1.0     0.10
COEF-1     62.   11.                    0.10    0.1     0.0     1.0     0.10
ENDATA12
!            ORGN    ORGN     ORGN    NH3     NH3     PO4    DENIT   ORGP    ORGP    ORGP
!       R#   DECAY   SETT     AVAIL   DEC     SRC     SRC    RATE    DEC     SETT    AVAIL
!      ***   -------********-------********-------********-------********-------********
COEF-2      1.   0.05    0.1     1.00    0.3                     0.10
COEF-2      2.   0.05    0.1     1.00    0.3                     0.10
COEF-2      3.   0.05    0.1     1.00    0.3                     0.10
COEF-2      4.   0.05    0.1     1.00    0.3                     0.10
COEF-2      5.   0.05    0.1     1.00    0.3                     0.10
COEF-2      6.   0.05    0.1     1.00    0.3                     0.10
COEF-2      7.   0.05    0.1     1.00    0.3                     0.10
COEF-2      8.   0.05    0.1     1.00    0.3                     0.10
COEF-2      9.   0.05    0.1     1.00    0.3                     0.10
COEF-2     10.   0.05    0.1     1.00    0.3                     0.10
COEF-2     11.   0.05    0.1     1.00    0.3                     0.10
COEF-2     12.   0.05    0.1     1.00    0.3                     0.10
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COEF-2     13.   0.05   0.1    1.00   0.3                  0.10
COEF-2     14.   0.05   0.1    1.00   0.3                  0.10
COEF-2     15.   0.05   0.1    1.00   0.3                  0.10
COEF-2     16.   0.05   0.1    1.00   0.3                  0.10
COEF-2     17.   0.05   0.1    1.00   0.3                  0.10
COEF-2     18.   0.05   0.1    1.00   0.3                  0.10
COEF-2     19.   0.05   0.1    1.00   0.3                  0.10
COEF-2     20.   0.05   0.1    1.00   0.3                  0.10
COEF-2     21.   0.05   0.1    1.00   0.3                  0.10
COEF-2     22.   0.05   0.1    1.00   0.3                  0.10
COEF-2     23.   0.05   0.1    1.00   0.3                  0.10
COEF-2     24.   0.05   0.1    1.00   0.3                  0.10
COEF-2     25.   0.05   0.1    1.00   0.3                  0.10
COEF-2     26.   0.05   0.1    1.00   0.3                  0.10
COEF-2     27.   0.05   0.1    1.00   0.3                  0.10
COEF-2     28.   0.05   0.1    1.00   0.3                  0.10
COEF-2     29.   0.05   0.1    1.00   0.3                  0.10
COEF-2     30.   0.05   0.1    1.00   0.3                  0.10
COEF-2     31.   0.05   0.1    1.00   0.3                  0.10
COEF-2     32.   0.05   0.1    1.00   0.3                  0.10
COEF-2     33.   0.05   0.1    1.00   0.3                  0.10
COEF-2     34.   0.05   0.1    1.00   0.3                  0.10
COEF-2     35.   0.05   0.1    1.00   0.3                  0.10
COEF-2     36.   0.05   0.1    1.00   0.3                  0.10
COEF-2     37.   0.05   0.1    1.00   0.3                  0.10
COEF-2     38.   0.05   0.1    1.00   0.3                  0.10
COEF-2     39.   0.05   0.1    1.00   0.3                  0.10
COEF-2     40.   0.05   0.1    1.00   0.3                  0.10
COEF-2     41.   0.05   0.1    1.00   0.3                  0.10
COEF-2     42.   0.05   0.1    1.00   0.3                  0.10
COEF-2     43.   0.05   0.1    1.00   0.3                  0.10
COEF-2     44.   0.05   0.1    1.00   0.3                  0.10
COEF-2     45.   0.05   0.1    1.00   0.3                  0.10
COEF-2     46.   0.05   0.1    1.00   0.3                  0.10
COEF-2     47.   0.05   0.1    1.00   0.3                  0.10
COEF-2     48.   0.05   0.1    1.00   0.3                  0.10
COEF-2     49.   0.05   0.1    1.00   0.3                  0.10
COEF-2     50.   0.05   0.1    1.00   0.3                  0.10
COEF-2     51.   0.05   0.1    1.00   0.3                  0.10
COEF-2     52.   0.05   0.1    1.00   0.3                  0.10
COEF-2     53.   0.05   0.1    1.00   0.3                  0.10
COEF-2     54.   0.05   0.1    1.00   0.3                  0.10
COEF-2     55.   0.05   0.1    1.00   0.3                  0.10
COEF-2     56.   0.05   0.1    1.00   0.3                  0.10
COEF-2     57.   0.05   0.1    1.00   0.3                  0.10
COEF-2     58.   0.05   0.1    1.00   0.3                  0.10
COEF-2     59.   0.05   0.1    1.00   0.3                  0.10
COEF-2     60.   0.05   0.1    1.00   0.3                  0.10
COEF-2     61.   0.05   0.1    1.00   0.3                  0.10
COEF-2     62.   0.05   0.1    1.00   0.3                  0.10
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
!          E#  STREAM NAME                  FLOW    TEMP    SALIN   CM-I   CM-II   HDISP
!         **** f---------------------- *** --------********--------********--------********
HDWTR-1     1. ONION CREEK                 .00849  29.04           80.
HDWTR-1     3. WALNUT CREEK                .00000  30.5            80.
HDWTR-1   199. UNNAMED TRIBUTARY #5        .00000  30.5            80.
HDWTR-1   206. SOUTH ONION CREEK           .00000  30.5            80.
HDWTR-1   244. GATLIN CREEK                .00000  30.5            80.
HDWTR-1   265. JACKSON BRANCH              .00000  30.5            80.
HDWTR-1   302. PIER CREEK                  .00000  30.5            80.
HDWTR-1   357. ROCKY BRANCH                .00000  30.5            80.
HDWTR-1   375. RATTLESNAKE CREEK           .00000  30.5            80.
HDWTR-1   399. FLAT CREEK                  .00000  30.5            80.
ENDATA20
!          E#       DO       BOD1      ORG-N     NH3-N     NO3-N    BOD2
!         ****  ---------*********---------*********---------*********
HDWTR-2     1.     6.44     1.3       0.50      0.05      0.20
HDWTR-2     3.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   199.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   206.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   244.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   265.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   302.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   357.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   375.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   399.     6.0      1.3       0.50      0.05      0.20
ENDATA21
ENDATA22
JUNCTION  168.   2. ONION CREEK AND WALNUT CREEK
JUNCTION  200. 198. ONION CREEK AND UNNAMED TRIB #5
JUNCTION  207. 205. ONION CREEK AND SOUTH ONION CREEK
JUNCTION  245. 243. ONION CREEK AND GATLIN CREEK
JUNCTION  266. 264. ONION CREEK AND JACKSON BRANCH
JUNCTION  303. 301. ONION CREEK AND PIER CREEK
JUNCTION  358. 356. ONION CREEK AND ROCKY BRANCH
JUNCTION  376. 374. ONION CREEK AND RATTLESNAKE CREEK
JUNCTION  400. 398. ONION CREEK AND FLAT CREEK
ENDATA23
!          E#  WASTELOAD NAME           FLOW     TEMP    SALIN     CM-I    CM-II
!         **** f----------------------*********---------**********---------*********
WSTLD-1    99. DRIPPING SP             0.04359
ENDATA24
!          E#       DO       BOD1    %BR   ORG-N     NH3-N    %NR    NO3-N     BOD2
!         ****  ---------*********------*********----------******----------*********
WSTLD-2    99.       6.0       5.                      2.0
ENDATA25
ENDATA26
ENDATA27
!        DAM#  DAM NAME              EQN     A       B       C
!        ****  ---------------------- ** --------********--------
DAM DATA  158  WALNUT CREEK FALLS     1    1.8     0.6     0.82
DAM DATA  171  CALITERRA POND DAM     1    1.8     0.6     2.23
DAM DATA  181  PENZ POND DAM RCH 7    1    1.8     0.6     2.59
DAM DATA  192  POND A DAM RCH 9       1    1.8     0.6     2.65
DAM DATA  197  POND B DAM RCH 10      1    1.8     0.6     1.43
DAM DATA  208  POND C DAM RCH 14      1    1.8     0.6     2.16
DAM DATA  221  POND E DAM RCH 19      1    1.8     0.6     1.56
DAM DATA  223  POND F DAM RCH 20      1    1.8     0.6     1.56
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DAM DATA  295  POND G DAM RCH 27     1    1.8      0.6      1.56
DAM DATA  327  POND H DAM RCH 31     1    1.8      0.6      1.22
DAM DATA  337  POND I DAM RCH 33     1    1.8      0.6      1.56
DAM DATA  347  POND J DAM RCH 35     1    1.8      0.6      2.13
DAM DATA  356  POND K DAM RCH 37     1    1.8      0.6      1.56
DAM DATA  373  POND L DAM RCH 41     1    1.8      0.6      0.57
DAM DATA  390  POND M DAM RCH 45     1    1.8      0.6      1.16
DAM DATA  397  POND N DAM RCH 46     1    1.8      0.6      1.25
DAM DATA  402  POND O DAM RCH 47     1    1.8      0.6      1.76
DAM DATA  415  POND P DAM RCH 51     1    1.8      0.6      1.56
DAM DATA  426  POND Q DAM RCH 53     1    1.8      0.6      1.55
DAM DATA  446  POND R DAM RCH 55     1    1.8      0.6      2.81
DAM DATA  450  POND S DAM RCH 56     1    1.8      0.6      1.56
DAM DATA  466  POND T DAM RCH 58     1    1.8      0.6      1.56
DAM DATA  469  POND U DAM RCH 59     1    1.8      0.6      1.44
DAM DATA  491  POND V DAM RCH 61     1    1.8      0.6      1.08
ENDATA28
!         CODE      VALUE  VALUE
!        ******** -------*******-------*******-------*******-------*******
SENSITIV DEPTH      -20.0   20.0
SENSITIV DAM H     -100.0
SENSITIV TEMPERAT    -0.4    0.2
!SENSITIV WSL DO     -16.0  -32.0
!SENSITIV HDW FLOW   -90.0  100.0
!SENSITIV BOD1 SET -100.0
!SENSITIV SOD        -50.0  -20.0
ENDATA29
PLOT1
RCH 1 4 5 6 7 8 9 10 11 13 14 16 17 18 19 20 21
PLOT2
RCH 23 24 26 27 28 30 31 32 33 34 35 36 37 38 40 41 42 44 45 46 47
PLOT3
RCH 49 50 51 52 53 54 55 56 57 58 59 60 61 62
PLOT4
RCH 2 3
PLOT5
RCH 1 4 5 6 7 8 9 10 11 13 14 16 17 18 19 20 21 23 24 26 27 28 30 31 32 33 34 35
RCH 36 37 38 40 41 42 44 45 46 47 49 50 51 52 53 54 55 56 57 58 59 60 61 62
ENDATA30
OVERLAY1 onioncreek.ovl
OVERLAY2 onioncreek.ovl
OVERLAY3 onioncreek.ovl
OVERLAY4 walnutcreek.ovl
OVERLAY5 onioncreek.ovl
ENDATA31
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APPENDIX B

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!--------1---------2---------3---------4---------5---------6---------7---------8---------9---------0---------1---------2---------3---------4---------5
!2345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890
CNTROL01     ONION CR/WALNUT CR - DRIPPING SPRINGS WWTP
CNTROL02     w/DISP & 5.0 mg/L BOD5,2.0 mg/L NH3-N & with CHLa
CNTROL12 YES METRIC UNITS
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I = CHLORIDES                  IN MG/L
MODOPT04  NO CONSERVATIVE MATERIAL II =                            IN
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =                            IN
ENDATA02
PROGRAM  HYDRAULIC CALCULATION METHOD       = 2.
PROGRAM  SETTLING RATE UNITS                = 2.
PROGRAM  BOD OXYGEN UPTAKE RATE             = 2.3
PROGRAM  EFFECTIVE BOD DUE TO ALGAE         = .00
PROGRAM  EFF ORGN DUE TO PHYTOPLANKTON      = .00
PROGRAM  N PHYTOPLANKTON UPTAKE             = .00
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID    1. OC UPPER CALITERRA POND              99.0      98.8    0.10
REACH ID    2. WA WALNUT CREEK-ROAD TO FALLS         1.65      0.1    0.01
REACH ID    3. WA WALNUT CREEK-FALLS TO MOUTH        0.1       0.0    0.01
REACH ID    4. OC LOWER CALITERRA POND              98.8      98.5    0.10
REACH ID    5. OC CALITERRA POND TO PENZ POND       98.5      98.4    0.10
REACH ID    6. OC UPPER PENZ POND                   98.4      97.9    0.10
REACH ID    7. OC LOWER PENZ POND                   97.9      97.5    0.10
REACH ID    8. OC PENZ POND TO POND E               97.5      96.7    0.10
REACH ID    9. OC POND A                            96.7      96.4    0.10
REACH ID   10. OC POND B                            96.4      95.9    0.10
REACH ID   11. OC POND B TO UNNAMED TRIB 5          95.9      95.7    0.10
REACH ID   12. U4 UNNAMED TRIBUTARY #5               0.01      0.0    0.01
REACH ID   13. OC UNNAMED TRIB 5 TO POND C          95.7      95.2    0.10
REACH ID   14. OC UPPER POOL C (ABOVE S ONION CR)   95.2      95.1    0.10
REACH ID   15. SO SOUTH ONION CREEK                  0.01      0.0    0.01
REACH ID   16. OC LOWER POOL C (BELOW S ONION CR)   95.1      95.0    0.10
REACH ID   17. OC POOL C TO POOL D                  95.0      94.8    0.10
REACH ID   18. OC POOL D                            94.8      94.0    0.10
REACH ID   19. OC POOL E                            94.0      93.7    0.10
REACH ID   20. OC POOL F                            93.7      93.5    0.10
REACH ID   21. OC POOL F TO GATLIN CR               93.5      91.4    0.10
REACH ID   22. GA GATLIN CREEK                       0.01      0.0    0.01
REACH ID   23. OC GATLIN CREEK TO FM 150            91.4      90.2    0.10
REACH ID   24. OC FM 150 TO JACKSON BRANCH          90.2      89.4    0.10
REACH ID   25. JA JACKSON BRANCH                    0.01      0.0    0.01
REACH ID   26. OC JACKSON BRANCH TO POND G          89.4      86.6    0.10
REACH ID   27. OC POND G                           86.6      86.5    0.10
REACH ID   28. OC POND G TO PIER BRANCH            86.5      85.8    0.10
REACH ID   29. PI PIER BRANCH                       0.01      0.0    0.01
REACH ID   30. OC PIER BRANCH TO POOL H            85.8      83.7    0.10
REACH ID   31. OC POOL H                           83.7      83.4    0.10
REACH ID   32. OC POOL H TO POOL I                 83.4      82.5    0.10
REACH ID   33. OC POOL I                           82.5      82.4    0.10
REACH ID   34. OC POOL I TO POOL J                 82.4      82.0    0.10
REACH ID   35. OC POOL J                           82.0      81.4    0.10
REACH ID   36. OC POOL J TO POOL K                 81.4      80.6    0.10
REACH ID   37. OC POOL K                           80.6      80.5    0.10
REACH ID   38. OC POOL K TO ROCKY BRANCH           80.5      80.4    0.10
REACH ID   39. RO ROCKY BRANCH                      0.01      0.0    0.01
REACH ID   40. OC ROCKY BRANCH TO POOL L           80.4      79.5    0.10
REACH ID   41. OC POOL L                           79.5      78.9    0.10
REACH ID   42. OC POOL L TO RATTLESNAKE CR         78.9      78.7    0.10
REACH ID   43. RA RATTLESNAKE CREEK                 0.01      0.0    0.01
REACH ID   44. OC RATTLESNAKE CR TO POOL M         78.7      77.9    0.10
REACH ID   45. OC POOL M                           77.9      77.3    0.10
REACH ID   46. OC POOL N                           77.3      76.6    0.10
REACH ID   47. OC UPPER POOL O (ABV FLAT CREEK)    76.6      76.4    0.10
REACH ID   48. FL FLAT CREEK                        0.01      0.0    0.01
REACH ID   49. OC LOWER POOL O (BLW FLAT CREEK)    76.4      76.2    0.10
REACH ID   50. OC POOL O TO POOL P                 76.2      75.3    0.10
REACH ID   51. OC POOL P                           75.3      74.9    0.10
REACH ID   52. OC POOL P TO POOL Q                 74.9      74.4    0.10
REACH ID   53. OC POOL Q                           74.4      73.8    0.10
REACH ID   54. OC POOL Q TO POOL R                 73.8      72.7    0.10
REACH ID   55. OC POOL R                           72.7      71.8    0.10
REACH ID   56. OC POOL S                           71.8      71.4    0.10
REACH ID   57. OC POOL S TO POOL T                 71.4      70.2    0.10
REACH ID   58. OC POOL T                           70.2      69.9    0.10
REACH ID   59. OC POOL U                           69.8      69.5    0.10
REACH ID   60. OC POOL U TO POOL V                 69.5      67.6    0.10
REACH ID   61. OC POOL V                           67.6      67.3    0.10
REACH ID   62. OC POOL V TO YORKS CREEK            67.3      67.2    0.10
ENDATA09
!                 a     b      c      d      e      f
!               WIDTH WIDTH  WIDTH  DEPTH  DEPTH  DEPTH
!         R#    COEFF  EXP   CONST  COEFF   EXP   CONST  SLOPE  MANNING EVAP
!        *** f--------*******--------*******-------*******--------*******-------
!start of Upper Caliterra Pond at Pedestrian Bridge/Dam
HYDR-1      1.   0.000  0.100 24.640  0.000  0.400  1.190   0.000
!start of Walnut Creek
HYDR-1      2.   4.420  0.100  0.000  0.520  0.400  0.000   0.000
HYDR-1      3.   4.420  0.100  0.000  0.520  0.400  0.000   0.000
!end of Walnut Creek (mouth)
HYDR-1      4.   0.000  0.100 23.680  0.000  0.400  1.670   0.000
!end of Lower Caliterra Pond/Dam
HYDR-1      5.  37.410  0.100  0.000  0.980  0.400  0.000   0.000
!start of Penz Pond
HYDR-1      6.   0.000  0.100 13.970  0.000  0.400  0.880   0.000
HYDR-1      7.   0.000  0.100 21.810  0.000  0.400  1.450   0.000
!end of Penz Pond
HYDR-1      8.  20.610  0.100  0.000  0.980  0.400  0.000   0.000
HYDR-1      9.   0.000  0.100 20.620  0.000  0.400  1.480   0.000
HYDR-1     10.   0.000  0.100 16.250  0.000  0.400  0.870   0.000
HYDR-1     11.  14.760  0.100  0.000  0.980  0.400  0.000   0.000
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HYDR-1     12.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     13.  13.510  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     14.   0.000  0.100  25.270  0.000  0.400  1.230   0.000
HYDR-1     15.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     16.   0.000  0.100  25.270  0.000  0.400  1.230   0.000
HYDR-1     17.  22.310  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     18.   0.000  0.100  20.310  0.000  0.400  0.960   0.000
HYDR-1     19.   0.000  0.100  12.720  0.000  0.400  0.960   0.000
HYDR-1     20.   0.000  0.100  16.690  0.000  0.400  0.960   0.000
HYDR-1     21.  17.210  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     22.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     23.  14.270  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     24.  11.900  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     25.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     26.  13.890  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     27.   0.000  0.100  14.400  0.000  0.400  0.960   0.000
HYDR-1     28.  12.050  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     29.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     30.  21.960  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     31.   0.000  0.100  22.200  0.000  0.400  0.760   0.000
HYDR-1     32.  19.250  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     33.   0.000  0.100  16.080  0.000  0.400  0.960   0.000
HYDR-1     34.  10.120  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     35.   0.000  0.100  14.670  0.000  0.400  1.220   0.000
HYDR-1     36.  18.200  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     37.   0.000  0.100  10.270  0.000  0.400  0.960   0.000
HYDR-1     38.  17.220  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     39.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     40.  18.040  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     41.   0.000  0.100  19.880  0.000  0.400  0.440   0.000
HYDR-1     42.  16.270  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     43.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     44.  14.950  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     45.   0.000  0.100  18.870  0.000  0.400  0.730   0.000
HYDR-1     46.   0.000  0.100  20.650  0.000  0.400  0.770   0.000
HYDR-1     47.   0.000  0.100  20.820  0.000  0.400  1.030   0.000
HYDR-1     48.  10.602  0.100   0.000  0.720  0.400  0.000   0.000
HYDR-1     49.   0.000  0.100  20.620  0.000  0.400  1.030   0.000
HYDR-1     50.  19.480  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     51.   0.000  0.100  21.940  0.000  0.400  0.960   0.000
HYDR-1     52.  17.220  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     53.   0.000  0.100  17.460  0.000  0.400  0.420   0.000
HYDR-1     54.  30.040  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     55.   0.000  0.100  37.500  0.000  0.400  1.560   0.000
HYDR-1     56.   0.000  0.100  17.740  0.000  0.400  0.960   0.000
HYDR-1     57.  21.220  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     58.   0.000  0.100  18.850  0.000  0.400  0.960   0.000
HYDR-1     59.   0.000  0.100  17.250  0.000  0.400  0.870   0.000
HYDR-1     60.  21.060  0.100   0.000  0.980  0.400  0.000   0.000
HYDR-1     61.   0.000  0.100  21.110  0.000  0.400  0.690   0.000
HYDR-1     62.  22.354  0.100   0.000  1.226  0.400  0.000   0.000
ENDATA09
!          R#  RANGE     a         b         c         d
!         ***  -----*********----------*********----------
HYDR-2      1.  0.00     0.15        0.0       0.0       0.0
HYDR-2      4.  0.00     0.15        0.0       0.0       0.0
HYDR-2      9.  0.00     0.15        0.0       0.0       0.0
HYDR-2     10.  0.00     0.15        0.0       0.0       0.0
HYDR-2     14.  0.00     0.15        0.0       0.0       0.0
HYDR-2     16.  0.00     0.15        0.0       0.0       0.0
HYDR-2     18.  0.00     0.15        0.0       0.0       0.0
HYDR-2     19.  0.00     0.15        0.0       0.0       0.0
HYDR-2     20.  0.00     0.15        0.0       0.0       0.0
HYDR-2     27.  0.00     0.15        0.0       0.0       0.0
HYDR-2     31.  0.00     0.15        0.0       0.0       0.0
HYDR-2     33.  0.00     0.15        0.0       0.0       0.0
HYDR-2     35.  0.00     0.15        0.0       0.0       0.0
HYDR-2     37.  0.00     0.15        0.0       0.0       0.0
HYDR-2     41.  0.00     0.15        0.0       0.0       0.0
HYDR-2     45.  0.00     0.15        0.0       0.0       0.0
HYDR-2     46.  0.00     0.15        0.0       0.0       0.0
HYDR-2     47.  0.00     0.15        0.0       0.0       0.0
HYDR-2     49.  0.00     0.15        0.0       0.0       0.0
HYDR-2     51.  0.00     0.15        0.0       0.0       0.0
HYDR-2     53.  0.00     0.15        0.0       0.0       0.0
HYDR-2     55.  0.00     0.15        0.0       0.0       0.0
HYDR-2     56.  0.00     0.15        0.0       0.0       0.0
HYDR-2     58.  0.00     0.15        0.0       0.0       0.0
HYDR-2     59.  0.00     0.15        0.0       0.0       0.0
HYDR-2     61.  0.00     0.15        0.0       0.0       0.0
ENDATA10
!          R#   TEMP   SALINITY   DO     NH3-N  NO3-N    PO4-P   CHL A   PERIP   BOD1    BOD2    ORG-N   ORG-P   COLI    NCM     CM-I    CM-II
!         ***  -------*********-------*********--------*********--------*********-------*********-------*********-------*********-------*********
INITIAL     1.   29.04             6.0     0.02    0.00              2.0
!start Walnut Creek
INITIAL     2.   30.5              6.0     0.02    0.00              2.0
INITIAL     3.   30.5              6.0     0.02    0.00              2.0
!end Walnut Creek
INITIAL     4.   29.04             6.0     0.02    0.00              2.0
INITIAL     5.   29.04             6.0     0.02    0.00              2.0
INITIAL     6.   29.04             6.0     0.02    0.00              2.0
INITIAL     7.   29.04             6.0     0.02    0.00              2.0
INITIAL     8.   29.04             6.0     0.02    0.00              2.0
INITIAL     9.   29.04             6.0     0.02    0.00              2.0
INITIAL    10.   29.04             6.0     0.02    0.00              2.0
INITIAL    11.   29.04             6.0     0.02    0.00              2.0
INITIAL    12.   30.5              6.0     0.02    0.00              2.0
INITIAL    13.   29.04             6.0     0.02    0.00              2.0
INITIAL    14.   29.04             6.0     0.02    0.00              2.0
INITIAL    15.   30.5              6.0     0.02    0.00              2.0
INITIAL    16.   29.04             6.0     0.02    0.00              2.0
INITIAL    17.   29.04             6.0     0.02    0.00              2.0
INITIAL    18.   29.04             6.0     0.02    0.00              2.0
INITIAL    19.   29.04             6.0     0.02    0.00              2.0
INITIAL    20.   29.04             6.0     0.02    0.00              2.0
INITIAL    21.   29.04             6.0     0.02    0.00              2.0
INITIAL    22.   30.5              6.0     0.02    0.00              2.0
INITIAL    23.   29.04             6.0     0.02    0.00              2.0
INITIAL    24.   29.04             6.0     0.02    0.00              2.0
INITIAL    25.   30.5              6.0     0.02    0.00              2.0
INITIAL    26.   29.04             6.0     0.02    0.00              2.0
INITIAL    27.   29.04             6.0     0.02    0.00              2.0
INITIAL    28.   29.04             6.0     0.02    0.00              2.0
INITIAL    29.   30.5              6.0     0.02    0.00              2.0
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INITIAL   30.   29.04         6.0    0.02    0.00          2.0
INITIAL   31.   29.04         6.0    0.02    0.00          2.0
INITIAL   32.   29.04         6.0    0.02    0.00          2.0
INITIAL   33.   29.04         6.0    0.02    0.00          2.0
INITIAL   34.   29.04         6.0    0.02    0.00          2.0
INITIAL   35.   29.04         6.0    0.02    0.00          2.0
INITIAL   36.   29.04         6.0    0.02    0.00          2.0
INITIAL   37.   29.04         6.0    0.02    0.00          2.0
INITIAL   38.   29.04         6.0    0.02    0.00          2.0
INITIAL   39.   30.5          6.0    0.02    0.00          2.0
INITIAL   40.   29.04         6.0    0.02    0.00          2.0
INITIAL   41.   29.04         6.0    0.02    0.00          2.0
INITIAL   42.   29.04         6.0    0.02    0.00          2.0
INITIAL   43.   30.5          6.0    0.02    0.00          2.0
INITIAL   44.   29.04         6.0    0.02    0.00          2.0
INITIAL   45.   29.04         6.0    0.02    0.00          2.0
INITIAL   46.   29.04         6.0    0.02    0.00          2.0
INITIAL   47.   29.04         6.0    0.02    0.00          2.0
INITIAL   48.   30.5          6.0    0.02    0.00          2.0
INITIAL   49.   29.04         6.0    0.02    0.00          2.0
INITIAL   50.   29.04         6.0    0.02    0.00          2.0
INITIAL   51.   29.04         6.0    0.02    0.00          2.0
INITIAL   52.   29.04         6.0    0.02    0.00          2.0
INITIAL   53.   29.04         6.0    0.02    0.00          2.0
INITIAL   54.   29.04         6.0    0.02    0.00          2.0
INITIAL   55.   29.04         6.0    0.02    0.00          2.0
INITIAL   56.   29.04         6.0    0.02    0.00          2.0
INITIAL   57.   29.04         6.0    0.02    0.00          2.0
INITIAL   58.   29.04         6.0    0.02    0.00          2.0
INITIAL   59.   29.04         6.0    0.02    0.00          2.0
INITIAL   60.   29.04         6.0    0.02    0.00          2.0
INITIAL   61.   29.04         6.0    0.02    0.00          2.0
INITIAL   62.   29.04         6.0    0.02    0.00          2.0
ENDATA11
!          REARC  a     b     c          BOD1   BOD1   SETT   BOD1   BOD2   BOD2   SETT   BOD2   BOD2
!       R#  EQN   K2    K2    K2   SOD   DECAY  SETT   AVAIL  ANAER  DECAY  SETT   AVAIL  ANAER  HYDR
!      ***  -----******-----******-------******-------******-------******-------******-------******
COEF-1    1.  20.  1.000           0.10   0.1    0.0    1.0    0.10
!start Walnut Creek
COEF-1    2.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1    3.  11.                  0.10   0.1    0.0    1.0    0.10
!end Walnut Creek
COEF-1    4.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1    5.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1    6.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1    7.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1    8.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1    9.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   10.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   11.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   12.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   13.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   14.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   15.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   16.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   17.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   18.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   19.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   20.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   21.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   22.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   23.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   24.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   25.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   26.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   27.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   28.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   29.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   30.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   31.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   32.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   33.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   34.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   35.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   36.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   37.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   38.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   39.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   40.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   41.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   42.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   43.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   44.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   45.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   46.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   47.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   48.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   49.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   50.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   51.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   52.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   53.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   54.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   55.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   56.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   57.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   58.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   59.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   60.  11.                  0.10   0.1    0.0    1.0    0.10
COEF-1   61.  20.  1.000           0.10   0.1    0.0    1.0    0.10
COEF-1   62.  11.                  0.10   0.1    0.0    1.0    0.10
ENDATA12
!            ORGN   ORGN   ORGN   NH3    NH3    PO4    DENIT  ORGP   ORGP   ORGP
!       R#   DECAY  SETT   AVAIL  DEC    SRC    SRC    RATE   DEC    SETT   AVAIL
!      ***   -------*******-------*******-------*******-------*******-------*******
COEF-2    1.  0.05   0.1    1.00   0.3                  0.10
COEF-2    2.  0.05   0.1    1.00   0.3                  0.10
COEF-2    3.  0.05   0.1    1.00   0.3                  0.10
COEF-2    4.  0.05   0.1    1.00   0.3                  0.10
COEF-2    5.  0.05   0.1    1.00   0.3                  0.10
COEF-2    6.  0.05   0.1    1.00   0.3                  0.10
COEF-2    7.  0.05   0.1    1.00   0.3                  0.10
COEF-2    8.  0.05   0.1    1.00   0.3                  0.10
COEF-2    9.  0.05   0.1    1.00   0.3                  0.10
```

```
COEF-2     10.   0.05   0.1    1.00   0.3                  0.10
COEF-2     11.   0.05   0.1    1.00   0.3                  0.10
COEF-2     12.   0.05   0.1    1.00   0.3                  0.10
COEF-2     13.   0.05   0.1    1.00   0.3                  0.10
COEF-2     14.   0.05   0.1    1.00   0.3                  0.10
COEF-2     15.   0.05   0.1    1.00   0.3                  0.10
COEF-2     16.   0.05   0.1    1.00   0.3                  0.10
COEF-2     17.   0.05   0.1    1.00   0.3                  0.10
COEF-2     18.   0.05   0.1    1.00   0.3                  0.10
COEF-2     19.   0.05   0.1    1.00   0.3                  0.10
COEF-2     20.   0.05   0.1    1.00   0.3                  0.10
COEF-2     21.   0.05   0.1    1.00   0.3                  0.10
COEF-2     22.   0.05   0.1    1.00   0.3                  0.10
COEF-2     23.   0.05   0.1    1.00   0.3                  0.10
COEF-2     24.   0.05   0.1    1.00   0.3                  0.10
COEF-2     25.   0.05   0.1    1.00   0.3                  0.10
COEF-2     26.   0.05   0.1    1.00   0.3                  0.10
COEF-2     27.   0.05   0.1    1.00   0.3                  0.10
COEF-2     28.   0.05   0.1    1.00   0.3                  0.10
COEF-2     29.   0.05   0.1    1.00   0.3                  0.10
COEF-2     30.   0.05   0.1    1.00   0.3                  0.10
COEF-2     31.   0.05   0.1    1.00   0.3                  0.10
COEF-2     32.   0.05   0.1    1.00   0.3                  0.10
COEF-2     33.   0.05   0.1    1.00   0.3                  0.10
COEF-2     34.   0.05   0.1    1.00   0.3                  0.10
COEF-2     35.   0.05   0.1    1.00   0.3                  0.10
COEF-2     36.   0.05   0.1    1.00   0.3                  0.10
COEF-2     37.   0.05   0.1    1.00   0.3                  0.10
COEF-2     38.   0.05   0.1    1.00   0.3                  0.10
COEF-2     39.   0.05   0.1    1.00   0.3                  0.10
COEF-2     40.   0.05   0.1    1.00   0.3                  0.10
COEF-2     41.   0.05   0.1    1.00   0.3                  0.10
COEF-2     42.   0.05   0.1    1.00   0.3                  0.10
COEF-2     43.   0.05   0.1    1.00   0.3                  0.10
COEF-2     44.   0.05   0.1    1.00   0.3                  0.10
COEF-2     45.   0.05   0.1    1.00   0.3                  0.10
COEF-2     46.   0.05   0.1    1.00   0.3                  0.10
COEF-2     47.   0.05   0.1    1.00   0.3                  0.10
COEF-2     48.   0.05   0.1    1.00   0.3                  0.10
COEF-2     49.   0.05   0.1    1.00   0.3                  0.10
COEF-2     50.   0.05   0.1    1.00   0.3                  0.10
COEF-2     51.   0.05   0.1    1.00   0.3                  0.10
COEF-2     52.   0.05   0.1    1.00   0.3                  0.10
COEF-2     53.   0.05   0.1    1.00   0.3                  0.10
COEF-2     54.   0.05   0.1    1.00   0.3                  0.10
COEF-2     55.   0.05   0.1    1.00   0.3                  0.10
COEF-2     56.   0.05   0.1    1.00   0.3                  0.10
COEF-2     57.   0.05   0.1    1.00   0.3                  0.10
COEF-2     58.   0.05   0.1    1.00   0.3                  0.10
COEF-2     59.   0.05   0.1    1.00   0.3                  0.10
COEF-2     60.   0.05   0.1    1.00   0.3                  0.10
COEF-2     61.   0.05   0.1    1.00   0.3                  0.10
COEF-2     62.   0.05   0.1    1.00   0.3                  0.10
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
!          E#  STREAM NAME                  FLOW    TEMP    SALIN   CM-I   CM-II   HDISP
!         **** f-------------------- *** --------********--------*********--------*********
HDWTR-1     1. ONION CREEK                .00849  29.04           80.
HDWTR-1     3. WALNUT CREEK               .00000  30.5            80.
HDWTR-1   199. UNNAMED TRIBUTARY #5       .00000  30.5            80.
HDWTR-1   206. SOUTH ONION CREEK          .00000  30.5            80.
HDWTR-1   244. GATLIN CREEK               .00000  30.5            80.
HDWTR-1   265. JACKSON BRANCH             .00000  30.5            80.
HDWTR-1   302. PIER CREEK                 .00000  30.5            80.
HDWTR-1   357. ROCKY BRANCH               .00000  30.5            80.
HDWTR-1   375. RATTLESNAKE CREEK          .00000  30.5            80.
HDWTR-1   399. FLAT CREEK                 .00000  30.5            80.
ENDATA20
!          E#       DO       BOD1     ORG-N     NH3-N     NO3-N   BOD2
!         ****  ---------*********---------*********---------*********
HDWTR-2     1.     6.44     1.3       0.50      0.05      0.20
HDWTR-2     3.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   199.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   206.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   244.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   265.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   302.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   357.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   375.     6.0      1.3       0.50      0.05      0.20
HDWTR-2   399.     6.0      1.3       0.50      0.05      0.20
ENDATA21
ENDATA22
JUNCTION  168.    2. ONION CREEK AND WALNUT CREEK
JUNCTION  200. 198. ONION CREEK AND UNNAMED TRIB #5
JUNCTION  207. 205. ONION CREEK AND SOUTH ONION CREEK
JUNCTION  245. 243. ONION CREEK AND GATLIN CREEK
JUNCTION  266. 264. ONION CREEK AND JACKSON BRANCH
JUNCTION  303. 301. ONION CREEK AND PIER CREEK
JUNCTION  358. 356. ONION CREEK AND ROCKY BRANCH
JUNCTION  376. 374. ONION CREEK AND RATTLESNAKE CREEK
JUNCTION  400. 398. ONION CREEK AND FLAT CREEK
ENDATA23
!          E#  WASTELOAD NAME          FLOW     TEMP    SALIN     CM-I    CM-II
!         **** f--------------------*********--------*********---------*********
WSTLD-1    99. DRIPPING SP           0.04359
ENDATA24
!          E#       DO       BOD1    %BR    ORG-N     NH3-N    %NR    NO3-N     BOD2
!         ****  ---------**********-----*********.........******---------**********
WSTLD-2    99.        6.0       5.                        2.0
ENDATA25
ENDATA26
ENDATA27
!        DAM#  DAM NAME              EQN      A        B        C
!        ****  -------------------- ** --------********---------
DAM DATA  158  WALNUT CREEK FALLS     1     1.8      0.6      0.82
DAM DATA  171  CALITERRA POND DAM     1     1.8      0.6      2.23
DAM DATA  181  PENZ POND DAM RCH 7    1     1.8      0.6      2.59
DAM DATA  192  POND A DAM RCH 9       1     1.8      0.6      2.65
DAM DATA  197  POND B DAM RCH 10      1     1.8      0.6      1.43
```

```
DAM DATA  208  POND C DAM RCH 14     1    1.8     0.6     2.16
DAM DATA  221  POND E DAM RCH 19     1    1.8     0.6     1.56
DAM DATA  223  POND F DAM RCH 20     1    1.8     0.6     1.56
DAM DATA  295  POND G DAM RCH 27     1    1.8     0.6     1.56
DAM DATA  327  POND H DAM RCH 31     1    1.8     0.6     1.22
DAM DATA  337  POND I DAM RCH 33     1    1.8     0.6     1.56
DAM DATA  347  POND J DAM RCH 35     1    1.8     0.6     2.13
DAM DATA  356  POND K DAM RCH 37     1    1.8     0.6     1.56
DAM DATA  373  POND L DAM RCH 41     1    1.8     0.6     0.57
DAM DATA  390  POND M DAM RCH 45     1    1.8     0.6     1.16
DAM DATA  397  POND N DAM RCH 46     1    1.8     0.6     1.25
DAM DATA  402  POND O DAM RCH 47     1    1.8     0.6     1.76
DAM DATA  415  POND P DAM RCH 51     1    1.8     0.6     1.56
DAM DATA  426  POND Q DAM RCH 53     1    1.8     0.6     1.55
DAM DATA  446  POND R DAM RCH 55     1    1.8     0.6     2.81
DAM DATA  450  POND S DAM RCH 56     1    1.8     0.6     1.56
DAM DATA  466  POND T DAM RCH 58     1    1.8     0.6     1.56
DAM DATA  469  POND U DAM RCH 59     1    1.8     0.6     1.44
DAM DATA  491  POND V DAM RCH 61     1    1.8     0.6     1.08
ENDATA28
!          CODE      VALUE  VALUE
!          ********* -------******-------*******-------*******-------*******
SENSITIV DEPTH      -20.0   20.0
SENSITIV DAM H     -100.0
SENSITIV TEMPERAT    -0.4    0.2
!SENSITIV WSL DO     -16.0  -32.0
!SENSITIV HDW FLOW   -90.0  100.0
!SENSITIV BOD1 SET -100.0
!SENSITIV SOD        -50.0  -20.0
ENDATA29
PLOT1
RCH 1 4 5 6 7 8 9 10 11 13 14 16 17 18 19 20 21
PLOT2
RCH 23 24 26 27 28 30 31 32 33 34 35 36 37 38 40 41 42 44 45 46 47
PLOT3
RCH 49 50 51 52 53 54 55 56 57 58 59 60 61 62
PLOT4
RCH 2 3
PLOT5
RCH 1 4 5 6 7 8 9 10 11 13 14 16 17 18 19 20 21 23 24 26 27 28 30 31 32 33 34 35
RCH 36 37 38 40 41 42 44 45 46 47 49 50 51 52 53 54 55 56 57 58 59 60 61 62
ENDATA30
OVERLAY1 onioncreek.ovl
OVERLAY2 onioncreek.ovl
OVERLAY3 onioncreek.ovl
OVERLAY4 walnutcreek.ovl
OVERLAY5 onioncreek.ovl
ENDATA31
```

Julian Centeno

From: Robby Callegari <rcallegari@cma-engineering.com>
Sent: Monday, December 14, 2015 10:51 AM
To: Julian Centeno
Cc: Andy Barrett (andy@thebarrettfirm.com); David Tuckfield (david@allawgp.com); Ginger Faught - City of Dripping Springs (gfaught@cityofdrippingsprings.com)
Subject: City of DS Wastewater Permit WQ0014488003 - Response to Technical Comments
Attachments: Response to 11-9-15 TCEQ Technical Comment Letter.pdf

Julian, attached are our responses to your 11-9-15 comment letter.

Thanks. Robby

Robert P. Callegari, P.E.
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CMA Engineering, Inc.

Firm No. F-3053

Robert P. Callegari, P.E.
Felix J. Manka, P.E.

December 14, 2015

Julian Centeno, Jr., P.E.
Municipal Permits Team
Wastewater Permitting Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: City of Dripping Springs
New TCEQ Permit Application
TPDES Permit Number WQ0014488003
Response to November 9, 2015 Comment Letter
CMA Job Number 1695-001

Dear Mr. Centeno:

Comment 1: Items 2(a) and (b) page 23 of the administrative report 1.1: To complete the application, we need for you to please confirm that the buffer zone map includes all facilities in all proposed phases.

Response 1: The buffer zone map in Attachment 3 includes all WWTP facilities in all proposed phases, with the exception of the reaeration structure at the proposed discharge point, but please note that a buffer is not required around a reaeration structure.

Comment 2: Item 3(b) on page 2 of the technical report 1.0: For clarity, we need for you to please summarize the number of units and dimensions per phase. Is the new facility proposed for Interim I the same as the facility for Interim II phase?

Response 2: Attached are a Summary of Treatment Units and excerpts (Tables 1.5, 1.6, 1.7, 1.8, 1.9, and 1.10; and Figure 1.12) from the Carollo Engineers Technical Memorandum No. 1 included in Attachment 7.

Comment 3: Item 3(c) on page 3 of the technical report 1.0: For clarity, we need for you to please provide a separate flow diagram per phase.

Response 3: Attached are revised process flow diagrams. Please note that the flow diagram for the Interim I and Interim II phases are identical.

235 Ledge Stone Dr.
Phone: (512) 432-1000

Austin, Texas 78737
Fax: (512) 432-1015

Comment 4: Item 6 page 4 of the technical report 1.0: Please respond "N/A," if not applicable.

Response 4: Attached is a revised page 4 of the technical report 1.0.

Comment 5: Item 7 page 4 of the technical report 1.0: The response indicates plans and specifications approval. This would not apply because a new facility plus a retrofitted facility are proposed for a new TPDES permit.

Response 5: The approval letter is for the current City of Dripping Springs Permit No. WQ0014488001 WWTP in operation. It is the same facility that will be retrofitted for Permit Number WQ0014488003. Attached is a revised page 4 of the technical report 1.0.

Comment 6: Item 8 on page 11 of the technical report 1.0: The entries are inconsistent with the application because a new facility plus a retrofitted facility are proposed for a new TPDES permit.

Response 6: The Pollutant Analysis is for the current City of Dripping Springs Permit No. WQ0014488001 WWTP in operation. It is the same facility that will be retrofitted for Permit Number WQ0014488003. Attached is a revised page 11 of the technical report 1.0.

Comment 7: Items 2 (a) and (c) on pages 22-23 of the technical report 1.1: Since the application is for a new permit, Table 1.1(4) should be completed.

Response 7: Our understanding is that Table 1.1(4) is required for applications that do not have influent data. Because influent data is collected for the existing WWTP to be retrofitted, the influent data used for preliminary design is based on an evaluation performed by Carollo Engineers of actual influent sample results. See Attachment 7, Table 1.2 (attached). Since such data is available, it seems reasonable to perform the preliminary design with actual influent data. Attached is a revised page 23 of the technical report 1.0.

Comment 8: Preliminary Engineering Report (Attachment 7): In the Introduction, the first sentence states that the City is "pursuing a new Texas Pollutant Discharge Elimination System (TPDES) Permit Amendment..." Please correct this to say just a new permit without the term "amendment."

Response 8: Attached are revised pages 1 and 3 of the Preliminary engineering Report.

If you have any questions or comments regarding these responses or application, please contact me at 512-432-1000.

Sincerely,

Robert P. Callegari, P.E.
Principal

Xc: Ginger Faught, City of Deputy City Administrator
Andy Barrett, Andy Barrett & Associates, PLLC
David Tuckfield, City of DS Wastewater Attorney
James Miertschin Ph.D., P.E., James Miertschin & Associates, Inc.
Eva Steinle-Darling, Ph.D., P.E., Carollo Engineers, Inc.
Tanja Rauch-Williams, Ph.D., P.E., Carollo Engineers, Inc.
City Hall Public Viewing Binder

Summary of Treatment Units - See Attachment 7 for Details

Parameter	Units	Interim Phase I	Interim Phase II	Final Phase
Number of Identical Trains	-	1	1	2
Total Capacity (ADMMF)	mgd	0.399	0.4975	0.995
Peak 2-hr Flow	mgd	1.6	1.99	3.98
Secondary Treatment (BNR)				
Total Basin Volume		327,340	327,340	654,680
All Basins in Common:				
Side Water Depth	ft	15.5	15.5	15.5
Inner diameter	ft	62	62	62
Outer diameter	ft	94	94	94
Zone 1 - Anoxic				
Number of Basins	-	1	1	2
Total Arc	deg	41	41	41
Volume	gal	52,320	52,320	104,640
Zone 2 - Aerobic				
Number of Basins	-	1	1	2
Arc	deg	115	115	115
Volume	gal	145,570	145,570	291,140
Zone 3 - Anoxic				
Number of Basins	-	1	1	2
Arc	deg	77	77	77
Volume	gal	97,930	97,930	195,866
Zone 4 - Aerobic				
Number of Basins	-	1	1	2
Arc	deg	23	23	23
Volume	gal	29,510	29,510	59,028
Secondary Clarifiers				
Total Basin Volume	gal	338,740	338,740	677,480
Number of clarifiers	-	1	1	2
Diameter	ft	62	62	62
Side water depth	ft	15.5	15.5	15.5
Tertiary Filters				
Total Filter Area	sf	280	420	560
Number of Filters	-	2	3	4
Hydraulic Loading Rate	gpm/sf	3	1.8	2.7
Filter width	ft	14	14	14
Filter length	ft	10	10	10
Chlorine Contact Basin				
Total Volume	gal	30,000	30,000	60,000
Number of units	-	1	1	2
HRT at 2-hr PDF	min	27	22	22

Table 1.5 Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.					
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Peak 2-hr Flow	mgd		1.6	1.99	3.98
BOD Loading at ADMMF	ppd		800	1,000	2,000
Activated Sludge Process					
Number of Treatment Trains	-	> 0.4 mgd two trains	1		2
Number of Basins per Train	-		1		
Total Volume of all Aeration Basins	gal		327,340		654,680
	1000 cf		43.9		87.8
Organic BOD Loading	ppd BOD /1,000 cf	<50	18.2	22.8	
Hydraulic Detention Time at 2-hr Peak Flow	hr	>1.8	4.9	3.9	
Total Aerated Volume	gal		177,080 (54%)		354,160 (54%)
Total Unaerated Volume	gal		150,250 (46%)		300,500 (46%)
Outer diameter	ft		94		
Inner diameter	ft		62		
Side Water Depth (SWD)	ft	> 10 ft diffuser submergence	15.5		
Number of zones per Basin	-		4		
Zone 1 - Anoxic					
Arc	Degrees		41		
Volume per Train	gal		52,320		
Total Volume	gal		52,320		104,640

Table 1.5	Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Zone 1 - Anoxic (continued)					
Hydraulic Retention Time at ADMMF	hrs		3.1	2.5	
% of total Aeration Volume	%			16 %	
Type of Mixing	-			Mechanical	
Zone 2 - Aerobic					
Arc	Degrees			115	
Volume per Train	gal			147,570	
Total Volume	gal			147,570	295,140
Hydraulic Retention Time at ADMMF	hrs		8.9	7.1	
% of total Aeration Volume	%			45 %	
Zone 3 - Anoxic					
Arc	Degrees			77	
Volume per Train	gal			97,930	
Total Volume	gal			97,930	195,866
Hydraulic Retention Time at ADMMF	hrs		5.9	4.7	
% of total Aeration Volume	%			30 %	
Type of Mixing	-			Mechanical	
Zone 4 - Aerobic					
Arc	Degrees			23	
Volume per Train	gal			29,510	
Total Volume	gal			29,510	59,028
Hydraulic Retention Time at ADMMF	hrs		1.8	1.4	
% of total Aeration Volume	%			9 %	

Table 1.5 Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.					
Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Mixed Liquor Recycle					
Flow at ADMMF	mgd		0.8	1.0	2.0
% of ADMMF Influent	%			200%	
External Carbon Addition					
Methanol equivalents	gpd		9.6	12	2436
Operational Design Conditions					
Min. Wastewater Temperature	°C			18	
Minimum aerobic SRT, (aSRT)	days			6	
Mixed Liquor Suspended Solids (MLSS)	mg/L	2,000-5,000	3,010	3,770	

The effluent alkalinity could be low (insufficient influent alkalinity data available to reliably model), suggesting that the implementation of an alkalinity addition system might be required. Carollo recommends the routine monitoring of alkalinity to determine whether alkalinity addition will be required.

Figure 1.12 illustrates the new zone configuration in the Bullseye treatment reactor after the conversion to a 4-Stage Bardenpho treatment process. It may be beneficial to split aerated Zone 2 in half with an additional baffle wall to improve nitrification through enhanced plug flow.

Table 1.6	Conceptual BNR Design Criteria - Secondary Clarification City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	**Units[1]**	**Texas Design Require-ments**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Peak 2-hr Flow	mgd		1.6	1.99	3.98
Secondary Clarifiers					
Number of Units	-	> 0.4 mgd two trains	1		2
Volume	cf		45,286		90,572
	gal		338,740		677,480
Diameter	ft		62		
Surface area	sf		3,019		6,040
Side water depth	ft	>10	15.5		
Weir length	ft		185.4		370
Design Sludge Volume Index (SVI)	mL/g		150		
Clarifier Safety Factor (CSF)	-		2.7		
Weir Loading Rate @ Peak 2-hr Flow	gal/ft	<20,000	5,720	10,730	
Surface Overflow Rate @ Peak 2-hr Flow	gal/sf/day	<1,200	350	660	
Return Activated Sludge Pumps					
Type of Pumps	-		VFD Controlled		
Flow at 150 % of Permitted Influent	mgd		0.6	0.75	1.5
	gpm		420	490	980
Turndown (40% of ADMMF)	mgd		0.16	0.2	0.4
Waste Activated Sludge Pumps					
Type of pumps	-		VFD Controlled		
Number of pumps	-		2		4

10.1.5 Chemical Addition

Chemical addition for phosphorus removal will be added upstream of tertiary filtration with the option to add chemicals also upstream of the secondary clarifiers. Adequate provisions must be included during preliminary and final design to allow for metered dosing and effective mixing, and coagulation to occur upstream of the filters to avoid unnecessary chemical consumption. Design requirements in accordance with Subchapter K of the TAC must be followed. Table 1.7 summarizes the chemical feed design criteria.

Table 1.7 Conceptual BNR Design Criteria - Chemical Alum Feed
City of Dripping Springs Conceptual BNR Design
CMA Engineering, Inc.

Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Chemical Addition					
Type of Chemical	-			Alum	
Dose	gpd		5.5	7.0	14.0
Chemical Strength	mg Al/L			150,000	

10.1.6 Tertiary Filtration

Post-secondary treatment chemical alum addition, flocculation and tertiary filtration will be provided to remove particulate phosphorus (§217.190(a)). As previously explained in section 9.1.2, for planning purposes it was assumed that a conventional down-flow media filter will be used. Preliminary and final design should evaluate whether cloth filters are a suitable cost-effective alternative for effluent polishing. Design criteria for the tertiary filters are summarized in Table 1.8. A minimum of two filter units must be provided for a facility using filtration to provide tertiary treatment for a permit requirement.

The down-flow media filters were sized per TAC by calculating the required filter surface area based on the peak flow through the filters with the largest filter unit out of service using a conservative hydraulic loading rate of 3 gpm per square foot of media surface for a single media filter (Table 1.8). Filtered water will be used for backwash water and will be returned from the filters to the head of the facility for processing. Surface air and/or water will be used for filter scouring.

Table 1.8	Conceptual BNR Design Criteria - Media Filtration City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
PDF	gpd		611,800	762,840	1,525,600
Tertiary Filters					
Type of Filter	-		Single or Dual Media, down-flow		
Hydraulic Loading Rate	gpm/sf	<3	3.0	1.8	2.7
Number of Units	-	>2	2	3	4
Filter Size, each	sf			140	
Filter Size, total	sf		280	420	560

10.1.7 Disinfection

It is planned to use chlorine for final disinfection. Final disinfection needs to occur downstream of the tertiary P removal filters and therefore, a new chlorine dosing system and chlorine contact tank must be built on-site upstream of the effluent storage tank. The capacity of the chlorination system will need to be upgraded to safely treat the projected design flows for all Permit Phases (Figure 1.9).

Per Chapter 30 TAC 217.281 (b) (1), the Chlorine Contact Basin must be sized to provide a minimum Cl_2 contact time of 20 minutes at the peak flow, meaning the peak 2-hour flow. The dosage requirements are based on the effluent type (Chapter 30 TAC 217.272 (b), Table K.1). For secondary effluent, the dose required is 8 mg/L, for tertiary or nitrified, it is 6 mg/L. Per discharge permit, a 1 mg/L chlorine residual must be maintained after a CT of 20 min.

Table 1.9	Conceptual BNR Design Criteria - Final Disinfection City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
Peak 2-hr Flow	mgd		1.6	1.99	3.98
Disinfection					
Oxidant	-		Gaseous chlorine		
Dosage	mg/L	>6 mg/L	> 6 mg/L		
Residual	mg/L	>1 mg/L	> 1 mg/L		
Chlorine Contact Basin					
Size	gal		30,000		60,000
HRT @ 2-hr PDF	min	>20	27	22	22

10.1.8 Process Monitoring and Control

BNR treatment for ultra-low nutrient limits requires a robust process monitoring and control support for reliable treatment and cost-effective process operation and chemical applications. During preliminary and detailed design the benefits of online instrumentation need to be further evaluated to reliably control e.g., DO concentrations in the aerated zones, effluent ammonia and nitrate, sludge blanket levels in the SCs, tertiary effluent phosphorous and turbidity. Effective and reliable process operation is also facilitated through automated electronic recording of such relevant data series. Per TAC, at minimum WAS and RAS flows need to be metered and controllable for enhanced BNR operation. The monitoring frequency of influent, effluent, and individual process operations will need to be increased to assure adequate BNR performance and chemical dosing. Specifically, aeration control and solids inventory management will need to be tightly controlled from day-to-day operation so ammonia and nitrate removal is adequately balanced.

10.1.9 Aerobic Digestion, Storage, and Sludge Hauling

Table 1.9 summarizes the WAS flow projections under ADMMF conditions in the Interim I and Interim II Phases at an aSRT of 6 days. The temperature in the sludge holding tanks is close to 18 °C in winter months.

Per 30 TAC 217, the volatile solids (VS) loading rate for aerobic digestion must be designed to be at least 100 lb but not more than 200 lb of VS per 1,000 cf per day. The DO concentration maintained in the liquid must be at least 0.5 mg/L. Energy input for mixing

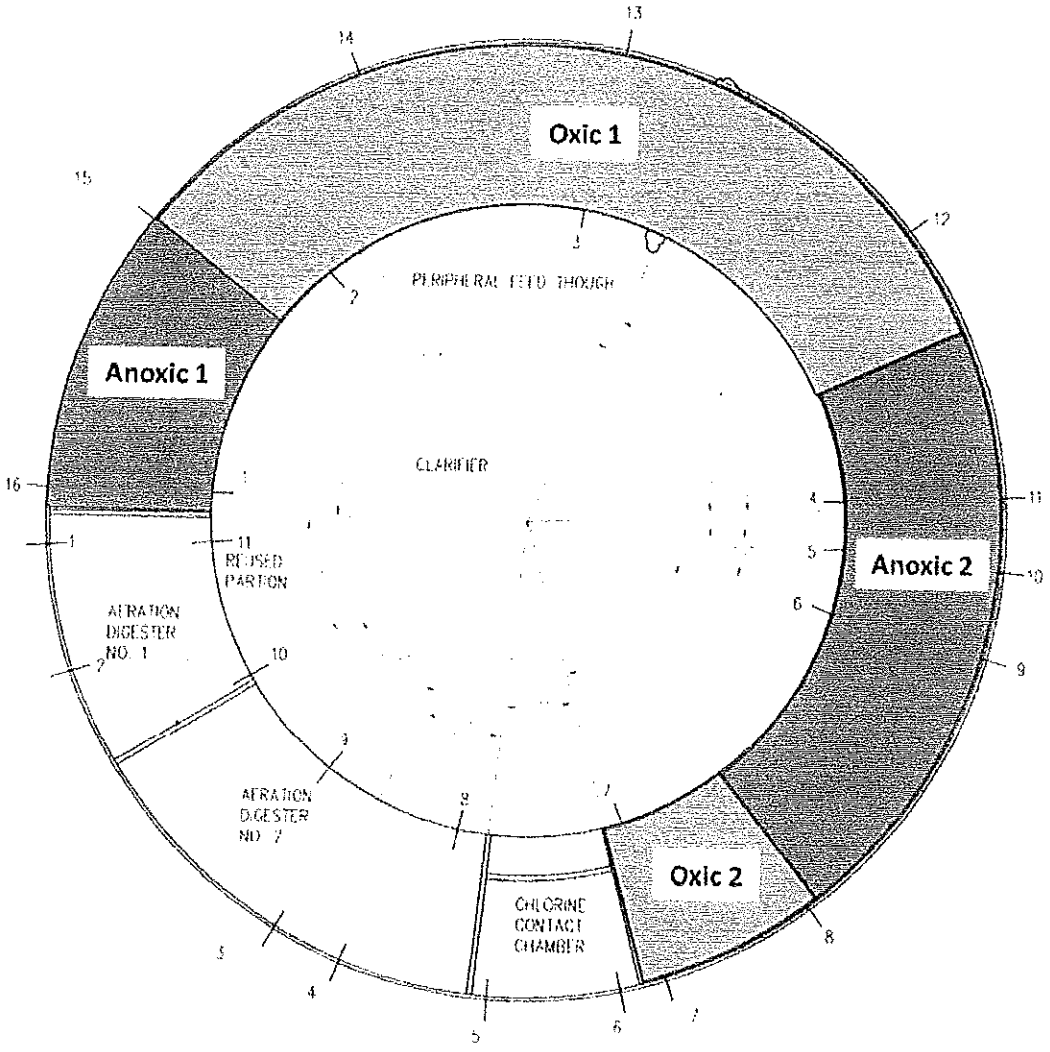
must be at least 20 scfm per 1,000 cf of aeration tank if diffused air mixing is used. The minimum HRT for staged aerobic digestion at 20 degrees is 28 days and for non-staged aerobic digestion 40 days. As the volume in the tanks does not meet the aerobic digester requirements, the tanks are serving as sludge holding tanks (see Table 1.10).

Table 1.10 Conceptual BNR Design Criteria - Sludge Holding Tanks
City of Dripping Springs Conceptual BNR Design
CMA Engineering, Inc.

Criteria	Units	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Waste Activated Sludge					
Flow at ADMMF in winter (100%)	gpd		10,000	11,000	22,000
Proportionally Scaled:					
75%	*gpd*		*7,500*	*8,250*	*16,500*
50%	*gpd*		*5,000*	*5,500*	*11,000*
25%	*gpd*		*2,500*	*2,750*	*5,500*
TSS concentration	%			1.0	
VSS Load	ppd		526	655	1,310
Sludge Holding Tanks					
Number of Basins (existing)	-		3		6
Total Volume[1)]	gal		135,150		270,300
	1,000 cf		18.1		36.1
HRT at ADMMF	days	[2)]	13.5	12.3	12.3
VSS Loading Rate	ppd/	100 - 200 lb per 1,000 cf per day	29.1	36.2	

Notes:
1. The total shown here includes the volume currently being used for chlorine contact in the existing treatment train and assumes that new chlorine contact basins will be constructed.
2. The minimum HRT for staged aerobic digestion at 20 degrees is 28 days and for non-staged aerobic digestion 40 days. As the volume does not meet the aerobic digester requirements, the tanks are serving as sludge holding tanks.

As an alternative to meeting minimum criteria for aerobic digestion, the existing permit allows for alternative options for disposal of solids that are not dewatered, and it is assumed that these options will remain available in the future. Under the current hauling procedure



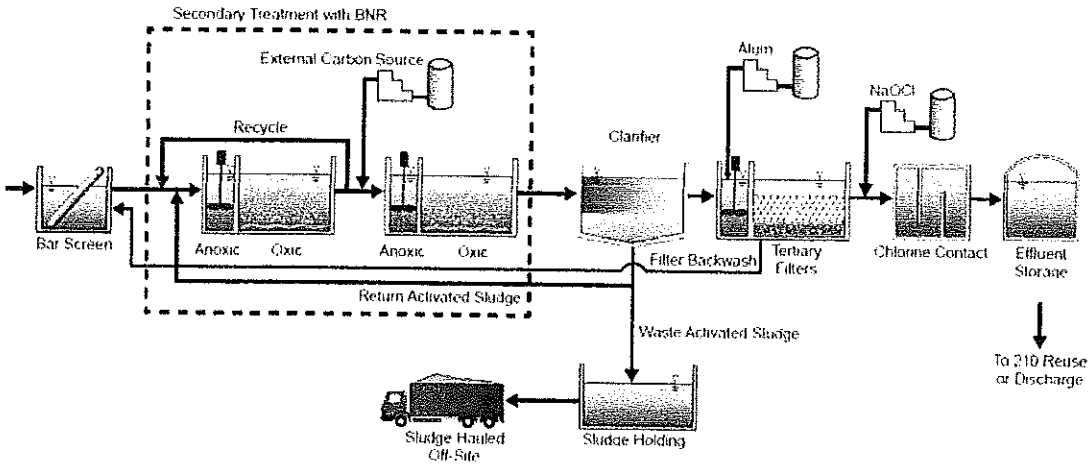
Background image provided by CMA Engineering, Inc.

PROPOSED AERATION BASIN CONFIGURATION (PLAN VIEW)

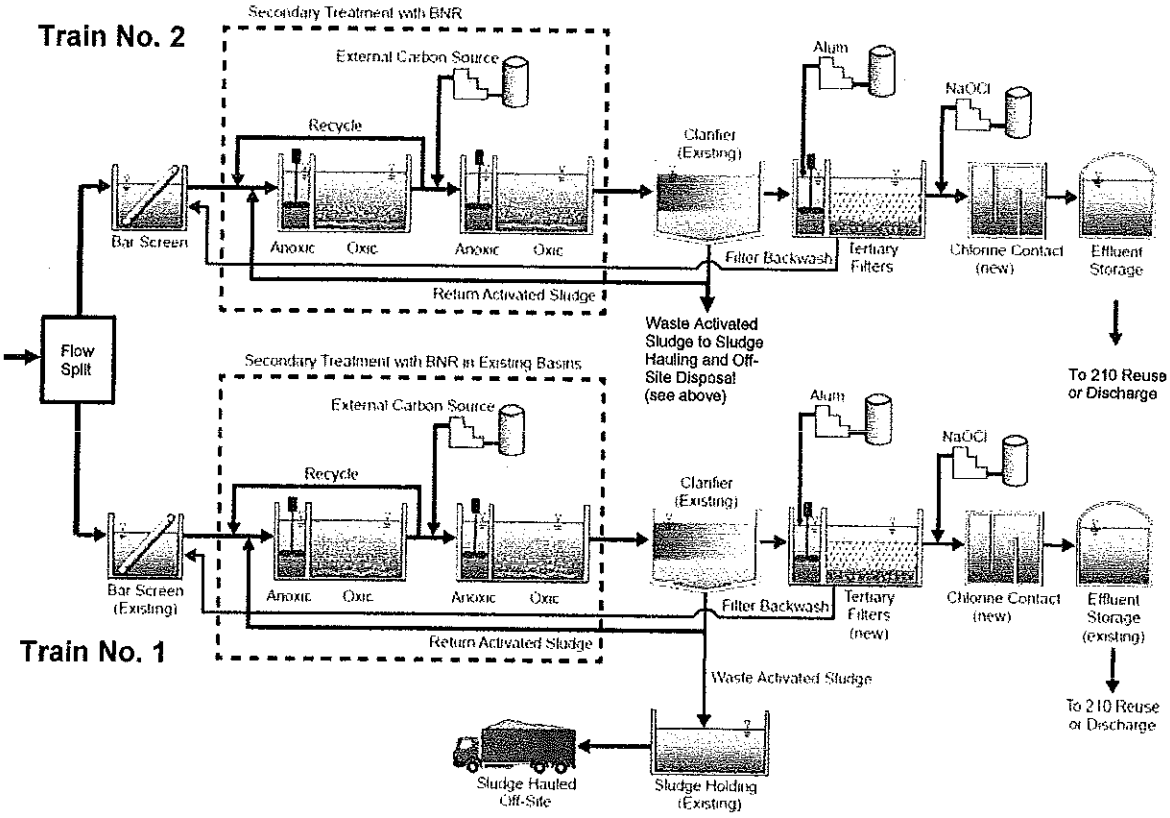
FIGURE 1.12

CMA ENGINEERING, INC
CITY OF DRIPPING SPRINGS CONCEPTUAL BNR DESIGN

Train No. 2 Constructed for Interim Phase I and Interim Phase II:



Existing Train No. 1 Retrofitted to Complete Final Phase:



REVISED PROCESS FLOW DIAGRAM FOR SOUTH REGIONAL WASTEWATER TREATMENT PLANT WITH BNR UPGRADES

Revised FIGURE 1.11

CMA ENGINEERING, INC.
CITY OF DRIPPING SPRINGS
CONCEPTUAL BNR DESIGN

carollo

6. Closure Plans

(Instructions, Page 51)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☐ Yes ■ No

If yes, was a closure plan submitted to the TCEQ?

☐ Yes ☐ No

If yes, provide a brief description of the closure and the date of plan approval.

N/A

7. Permit Specific Requirements

(Instructions, Page 52)

a. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

■ Yes ☐ No

If yes, provide the date(s) of approval for each phase: 6/18/2007

For applicants with an existing permit: Check the *Other Requirements* or *Special Provisions* of the existing permit and provide information below (including dates) on any actions taken to meet an *Other Requirement* or *Special Provision* pertaining to the submission of a summary transmittal letter, if applicable. Also, if in possession of an approval letter from the TCEQ, provide a copy.

The approval letter is for the current City of Dripping Springs Permit No. WQ0014488001 WWTP in operation. It is the same facility that will be retrofitted for Permit Number WQ0014488003.

8. Pollutant Analysis of Treated Effluent

(Instructions, Page 57) See Attachment 9

Provide an analysis of the treated effluent for the following pollutants (data must be sampled within 1 year of application submission) in the table below. Effluent data is not required for new permit applications unless the facility is in operation. For ***water treatment facilities*** discharging filter backwash water, use the second table below.

Table 1.0(5) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	3.0	25	186	Grab	Jan 2012 - Sep 2015
Total Suspended Solids, mg/l	3.2	29	186	Grab	Jan 2012 - Sep 2015
Ammonia Nitrogen, mg/l	7.1	46	165	Grab	May 2014 - Sep 2015
Nitrate Nitrogen, mg/l	11.0	55	163	Grab	May 2014 - Sep 2015
Total Kjeldahl Nitrogen, mg/l	8.2	46	164	Grab	May 2014 - Sep 2015
Sulfate, mg/l	24.1		1	Grab	October 8, 2015
Chloride, mg/l	222		1	Grab	October 8, 2015
Total Phosphorus, mg/l	6.94		1	Grab	October 8, 2015
pH, standard units	7.4		1	Grab	October 8, 2015
Dissolved Oxygen, mg/l	8.2		1	Grab	October 8, 2015
Chlorine Residual, mg/l	3.1		1	Grab	October 8, 2015
E.coli (colonies per 100ml) freshwater					
Entercocci (colonies per 100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	964		1	Grab	October 8, 2015
Electrical Conductivity, µmohs/cm	1460		1	Grab	October 8, 2015
Oil & Grease, mg/l	< 5.2		1	Grab	October 8, 2015
Alkalinity ($CaCO_3$), mg/l	79.8		1	Grab	October 8, 2015

Table 1.0(6) - Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, std. units					
Fluoride, mg/l					

Table 1.2	Wastewater Influent Load and Concentration Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.			
	Existing Flows (Jan to Aug 2014)[1]	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Influent Design Flows				
AADF, mgd	63,650	270,000	316,670	633,330
ADMMF, mgd (Permitted Flow)	92,590	399,000	497,500	995,000
Annual Average Daily Design Concentrations[2]				
Five-day biological oxygen demand (BOD_5), mg/L	227		227	
TSS, mg/L	NA[6]		250	
TKN, mg/L	53		53	
Ammonia nitrogen (NH_3-N), mg/L	38.6		38.6	
Total phosphorus (Total P), mg/L	6.9		6.9	
Annual Average Daily Design Loads[3]				
BOD_5, ppd	116 (±64.5)	510	600	1,200
TSS, ppd	NA	560	660	1,320
TKN, ppd	27.1 (±12.5)	120	140	280
NH_3-N, ppd	19.7 (±8.8)	87	100	200
Total P, ppd	3.5 (±1.8)	15.5	18.2	36.5
Maximum Month Design Concentrations[4]				
BOD_5, mg/L	241		241	
TSS, mg/L	NA		265	
TKN, mg/L	57		57	
NH_3-N, mg/L	39		39	
Total P, mg/L	7.2		7.2	

Average Influent Loading (lbs/day = total average flow x average BOD_5 conc. X 8.34)

1,200 lb BOD/day

Provide the source of the average organic strength or BOD_5 concentration.

City of Dripping Springs Influent Data See Attachment 7

If the increased flow will impact the existing organic strength, the following table must be completed.

c. Proposed organic loading

This table must be completed if applying for a new permit or if increased flow will impact organic loading.

Table 1.1(4) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD_5 Concentration (mg/l)
Municipality		City of DS Influent Data
Subdivision		See Attachment 7, Table 1.2
Trailer park – transient		of Carollo Engineers
Mobile home park		Technical Memorandum No. 1
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW		
AVERAGE BOD_5		

CITY OF DRIPPING SPRINGS
SOUTH REGIONAL WASTEWATER SYSTEM
HAYS COUNTY, TEXAS
WASTEWATER SYSTEM EXPNASION
PRELIMINARY ENGINEERING REPORT
NEW PERMIT APPLICATION

1.0 INTRODUCTION

The City of Dripping Springs (City) is pursuing a new Texas Pollutant Discharge Elimination System (TPDES) Permit for the expansion of it South Regional Wastewater System. The purpose of the new permit is to increase capacity of the City's South Regional Wastewater System and change its method of effluent disposal to accommodate growth in the Dripping Springs area. It's existing permitted capacity is 162,500 GPD via subsurface land application permit (TCEQ Permit Number WQ0014488001), and has an amendment pending to increase capacity via surface irrigation to 348,500 GPD. The City proposes to construct a new WWTP and increase the capacity of its existing WWTP, abandon the subsurface drip irrigation requirement from their existing permit, and convert the surface irrigation areas in the permit pending at the TCEQ to 30 TAC, Chapter 210 reuse, and discharge treated effluent to Walnut Springs, a tributary to Onion Creek.

The City is continuing to receive requests and inquiries for wastewater service within and outside of its existing service area. These include requests from developers of several large tracts located outside the existing service area that have obtained or are pursuing their own wastewater permits for onsite treatment and land application.

Additionally, the City will pursue Beneficial Reuse Authorization through 30 TAC, Chapter 210, which would allow the City to reuse treated effluent for irrigation on City-owned park lands and athletic fields, and potential irrigation of other privately owned areas (i.e., parks, greenbelts, pasture lands, etc.) to conserve treated surface water and/or groundwater resources. The City-owned park land and athletic fields, and other parks in the area currently utilize treated surface water from the West Travis County Public Utility Agency (WTCPUA) and groundwater from the Drippings Springs Water Supply Corporation (DSWSC) potable water systems. Other future reuses could be Direct Potable Reuse to supplement the existing treated surface water and/or groundwater supplies.

The City's existing South Regional Wastewater Treatment Plant is located along FM 150 approximately 0.55 miles east of Ranch Road 12 in Dripping Springs, Texas. The proposed discharge point is within the Caliterra Development located along the west side of Ranch Road 12 ("RR12") approximately 1.5 miles south of U.S. Highway 290, and immediately northwest of the Ranch Road 150 and Ranch Road 12 intersection in Dripping Springs, Texas (see Figure 1 for a Vicinity Map). The proposed WWTP would be located at the existing WWTP site.

2.0 PROPOSED HYDRAULIC AND ORGANIC WASTEWATER LOADINGS

2.1 Estimated Flows and Permit Phases

Flow projections from the CMA Engineering, Inc. (CMA) July 2013 Preliminary Engineering Planning Report for South Regional Wastewater System Expansion Planning were updated and used to establish phasing for the permit application. The City proposes to utilize new outfall (a tributary to Onion Creek) in the Caliterra Subdivision. The proposed permit will allow the City to provide wastewater service to the proposed Caliterra development and the Greater City of Dripping Springs Area.

A wastewater production rate of 175 GPD/LUE was used to establish capacity requirements for the City's wastewater treatment and disposal facilities. CMA Engineering, Inc. has found that the 175 GPD/LUE is typical of other residential subdivisions in the Dripping Springs area. Table 1 presents the summary of the estimated wastewater flow projections. Figure 2 is a Graph of the Wastewater Flow Projections.

The City is proposing three permit phases. The proposed Interim I Phase is 0.399 MGD and allows the City of operate the new WWTP in accordance with 30 TAC, Chapter 217.153(c) that requires that WWTPs over 0.400 MGD to have two aeration basins and two clarifiers for redundancy. This will allow the City to continue to grow while the existing WWTP is being retrofitted. The proposed Interim II Phase is 0.4975 MGD. If needed, it is hopeful that the TCEQ will grant the City a variance to 30 TAC, Chapter 217.153(c) during the retrofit of the existing WWTP allow the City to continue to keep growing. The proposed Final Phase is 0.995 MGD. Based on the conceptual design of the WWTP performed by Carollo Engineers (Carollo), the existing WWTP can be converted to a Biological Nutrient Removal (BNR) WWTP at the proposed permit phase capacities and meet the proposed effluent parameters. The Conceptual Design Engineering Report is included in Appendix A. The proposed permit phases are summarized below.

Interim I Phase:	0.399 MGD
Interim II Phase:	0.4975 MGD
Final Phase:	0.995 MGD

2.2 Peak Flow Rate

The peak flow to the WWTP is defined as the highest two-hour average flow rate expected to be delivered to the treatment units under any operational condition. It is proposed that influent flows will gravity flow to the WWTP influent lift stations, and then pumped from lift stations to the WWTP headworks. The peak factor used for the preliminary design of the WWTP is 4.0.

CMA Engineering, Inc.

Firm No. F-3053

Robert P. Callegari, P.E.
Felix J. Manka, P.E.

December 14, 2015

Julian Centeno, Jr., P.E.
Municipal Permits Team
Wastewater Permitting Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: City of Dripping Springs
New TCEQ Permit Application
TPDES Permit Number WQ0014488003
Response to November 9, 2015 Comment Letter
CMA Job Number 1695-001

Dear Mr. Centeno:

Comment 1: Items 2(a) and (b) page 23 of the administrative report 1.1: To complete the application, we need for you to please confirm that the buffer zone map includes all facilities in all proposed phases.

Response 1: The buffer zone map in Attachment 3 includes all WWTP facilities in all proposed phases, with the exception of the reaeration structure at the proposed discharge point, but please note that a buffer is not required around a reaeration structure.

Comment 2: Item 3(b) on page 2 of the technical report 1.0: For clarity, we need for you to please summarize the number of units and dimensions per phase. Is the new facility proposed for Interim I the same as the facility for Interim II phase?

Response 2: Attached are a Summary of Treatment Units and excerpts (Tables 1.5, 1.6, 1.7, 1.8, 1.9, and 1.10; and Figure 1.12) from the Carollo Engineers Technical Memorandum No. 1 included in Attachment 7.

Comment 3: Item 3(c) on page 3 of the technical report 1.0: For clarity, we need for you to please provide a separate flow diagram per phase.

Response 3: Attached are revised process flow diagrams. Please note that the flow diagram for the Interim I and Interim II phases are identical.

235 Ledge Stone Dr.
Phone: (512) 432-1000

Austin, Texas 78737
Fax: (512) 432-1015

Comment 4: Item 6 page 4 of the technical report 1.0: Please respond "N/A," if not applicable.

Response 4: Attached is a revised page 4 of the technical report 1.0.

Comment 5: Item 7 page 4 of the technical report 1.0: The response indicates plans and specifications approval. This would not apply because a new facility plus a retrofitted facility are proposed for a new TPDES permit.

Response 5: The approval letter is for the current City of Dripping Springs Permit No. WQ0014488001 WWTP in operation. It is the same facility that will be retrofitted for Permit Number WQ0014488003. Attached is a revised page 4 of the technical report 1.0.

Comment 6: Item 8 on page 11 of the technical report 1.0: The entries are inconsistent with the application because a new facility plus a retrofitted facility are proposed for a new TPDES permit.

Response 6: The Pollutant Analysis is for the current City of Dripping Springs Permit No. WQ0014488001 WWTP in operation. It is the same facility that will be retrofitted for Permit Number WQ0014488003. Attached is a revised page 11 of the technical report 1.0.

Comment 7: Items 2 (a) and (c) on pages 22-23 of the technical report 1.1: Since the application is for a new permit, Table 1.1(4) should be completed.

Response 7: Our understanding is that Table 1.1(4) is required for applications that do not have influent data. Because influent data is collected for the existing WWTP to be retrofitted, the influent data used for preliminary design is based on an evaluation performed by Carollo Engineers of actual influent sample results. See Attachment 7, Table 1.2 (attached). Since such data is available, it seems reasonable to perform the preliminary design with actual influent data. Attached is a revised page 23 of the technical report 1.0.

Comment 8: Preliminary Engineering Report (Attachment 7): In the Introduction, the first sentence states that the City is "pursuing a new Texas Pollutant Discharge Elimination System (TPDES) Permit Amendment..." Please correct this to say just a new permit without the term "amendment."

Response 8: Attached are revised pages 1 and 3 of the Preliminary engineering Report.

If you have any questions or comments regarding these responses or application, please contact me at 512-432-1000.

Sincerely,

Robert P. Callegari, P.E.
Principal

Xc: Ginger Faught, City of Deputy City Administrator
Andy Barrett, Andy Barrett & Associates, PLLC
David Tuckfield, City of DS Wastewater Attorney
James Miertschin Ph.D., P.E., James Miertschin & Associates, Inc.
Eva Steinle-Darling, Ph.D., P.E., Carollo Engineers, Inc.
Tanja Rauch-Williams, Ph.D., P.E., Carollo Engineers, Inc.
City Hall Public Viewing Binder

Summary of Treatment Units - See Attachment 7 for Details

Parameter	Units	Interim Phase I	Interim Phase II	Final Phase
Number of Identical Trains	-	1	1	2
Total Capacity (ADMMF)	mgd	0.399	0.4975	0.995
Peak 2-hr Flow	mgd	1.6	1.99	3.98
Secondary Treatment (BNR)				
Total Basin Volume		327,340	327,340	654,680
All Basins in Common:				
Side Water Depth	ft	15.5	15.5	15.5
Inner diameter	ft	62	62	62
Outer diameter	ft	94	94	94
Zone 1 - Anoxic				
Number of Basins	-	1	1	2
Total Arc	deg	41	41	41
Volume	gal	52,320	52,320	104,640
Zone 2 - Aerobic				
Number of Basins	-	1	1	2
Arc	deg	115	115	115
Volume	gal	145,570	145,570	291,140
Zone 3 - Anoxic				
Number of Basins	-	1	1	2
Arc	deg	77	77	77
Volume	gal	97,930	97,930	195,866
Zone 4 - Aerobic				
Number of Basins	-	1	1	2
Arc	deg	23	23	23
Volume	gal	29,510	29,510	59,028
Secondary Clarifiers				
Total Basin Volume	gal	338,740	338,740	677,480
Number of clarifiers	-	1	1	2
Diameter	ft	62	62	62
Side water depth	ft	15.5	15.5	15.5
Tertiary Filters				
Total Filter Area	sf	280	420	560
Number of Filters	-	2	3	4
Hydraulic Loading Rate	gpm/sf	3	1.8	2.7
Filter width	ft	14	14	14
Filter length	ft	10	10	10
Chlorine Contact Basin				
Total Volume	gal	30,000	30,000	60,000
Number of units	-	1	1	2
HRT at 2-hr PDF	min	27	22	22

Table 1.5	Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Peak 2-hr Flow	mgd		1.6	1.99	3.98
BOD Loading at ADMMF	ppd		800	1,000	2,000
Activated Sludge Process					
Number of Treatment Trains	-	> 0.4 mgd two trains	1		2
Number of Basins per Train	-		1		
Total Volume of all Aeration Basins	gal		327,340		654,680
	1000 cf		43.9		87.8
Organic BOD Loading	ppd BOD /1,000 cf	<50	18.2	22.8	
Hydraulic Detention Time at 2-hr Peak Flow	hr	>1.8	4.9	3.9	
Total Aerated Volume	gal		177,080 (54%)		354,160 (54%)
Total Unaerated Volume	gal		150,250 (46%)		300,500 (46%)
Outer diameter	ft		94		
Inner diameter	ft		62		
Side Water Depth (SWD)	ft	> 10 ft diffuser submergence	15.5		
Number of zones per Basin	-		4		
Zone 1 - Anoxic					
Arc	Degrees		41		
Volume per Train	gal		52,320		
Total Volume	gal		52,320		104,640

Table 1.5 Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.					
Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Zone 1 - Anoxic (continued)					
Hydraulic Retention Time at ADMMF	hrs		3.1	2.5	
% of total Aeration Volume	%			16 %	
Type of Mixing	-			Mechanical	
Zone 2 - Aerobic					
Arc	Degrees			115	
Volume per Train	gal			147,570	
Total Volume	gal		147,570		295,140
Hydraulic Retention Time at ADMMF	hrs		8.9	7.1	
% of total Aeration Volume	%			45 %	
Zone 3 - Anoxic					
Arc	Degrees			77	
Volume per Train	gal			97,930	
Total Volume	gal		97,930		195,866
Hydraulic Retention Time at ADMMF	hrs		5.9	4.7	
% of total Aeration Volume	%			30 %	
Type of Mixing	-			Mechanical	
Zone 4 - Aerobic					
Arc	Degrees			23	
Volume per Train	gal			29,510	
Total Volume	gal		29,510		59,028
Hydraulic Retention Time at ADMMF	hrs		1.8	1.4	
% of total Aeration Volume	%			9 %	

Table 1.5 Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.					
Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Mixed Liquor Recycle					
Flow at ADMMF	mgd		0.8	1.0	2.0
% of ADMMF Influent	%			200%	
External Carbon Addition					
Methanol equivalents	gpd		9.6	12	2436
Operational Design Conditions					
Min. Wastewater Temperature	°C			18	
Minimum aerobic SRT, (aSRT)	days			6	
Mixed Liquor Suspended Solids (MLSS)	mg/L	2,000-5,000	3,010	3,770	

The effluent alkalinity could be low (insufficient influent alkalinity data available to reliably model), suggesting that the implementation of an alkalinity addition system might be required. Carollo recommends the routine monitoring of alkalinity to determine whether alkalinity addition will be required.

Figure 1.12 illustrates the new zone configuration in the Bullseye treatment reactor after the conversion to a 4-Stage Bardenpho treatment process. It may be beneficial to split aerated Zone 2 in half with an additional baffle wall to improve nitrification through enhanced plug flow.

Table 1.6	Conceptual BNR Design Criteria - Secondary Clarification City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	Units[1]	Texas Design Require-ments	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Peak 2-hr Flow	mgd		1.6	1.99	3.98
Secondary Clarifiers					
Number of Units	-	> 0.4 mgd two trains	1		2
Volume	cf		45,286		90,572
	gal		338,740		677,480
Diameter	ft		62		
Surface area	sf		3,019		6,040
Side water depth	ft	>10	15.5		
Weir length	ft		185.4		370
Design Sludge Volume Index (SVI)	mL/g		150		
Clarifier Safety Factor (CSF)	-		2.7		
Weir Loading Rate @ Peak 2-hr Flow	gal/ft	<20,000	5,720	10,730	
Surface Overflow Rate @ Peak 2-hr Flow	gal/sf/day	<1,200	350	660	
Return Activated Sludge Pumps					
Type of Pumps	-		VFD Controlled		
Flow at 150 % of Permitted Influent	mgd		0.6	0.75	1.5
	gpm		420	490	980
Turndown (40% of ADMMF)	mgd		0.16	0.2	0.4
Waste Activated Sludge Pumps					
Type of pumps	-		VFD Controlled		
Number of pumps	-		2		4

10.1.5 Chemical Addition

Chemical addition for phosphorus removal will be added upstream of tertiary filtration with the option to add chemicals also upstream of the secondary clarifiers. Adequate provisions must be included during preliminary and final design to allow for metered dosing and effective mixing, and coagulation to occur upstream of the filters to avoid unnecessary chemical consumption. Design requirements in accordance with Subchapter K of the TAC must be followed. Table 1.7 summarizes the chemical feed design criteria.

Table 1.7 Conceptual BNR Design Criteria - Chemical Alum Feed
City of Dripping Springs Conceptual BNR Design
CMA Engineering, Inc.

Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Chemical Addition					
Type of Chemical	-			Alum	
Dose	gpd		5.5	7.0	14.0
Chemical Strength	mg Al/L			150,000	

10.1.6 Tertiary Filtration

Post-secondary treatment chemical alum addition, flocculation and tertiary filtration will be provided to remove particulate phosphorus (§217.190(a)). As previously explained in section 9.1.2, for planning purposes it was assumed that a conventional down-flow media filter will be used. Preliminary and final design should evaluate whether cloth filters are a suitable cost-effective alternative for effluent polishing. Design criteria for the tertiary filters are summarized in Table 1.8. A minimum of two filter units must be provided for a facility using filtration to provide tertiary treatment for a permit requirement.

The down-flow media filters were sized per TAC by calculating the required filter surface area based on the peak flow through the filters with the largest filter unit out of service using a conservative hydraulic loading rate of 3 gpm per square foot of media surface for a single media filter (Table 1.8). Filtered water will be used for backwash water and will be returned from the filters to the head of the facility for processing. Surface air and/or water will be used for filter scouring.

Table 1.8	Conceptual BNR Design Criteria - Media Filtration City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
PDF	gpd		611,800	762,840	1,525,600
Tertiary Filters					
Type of Filter	-		Single or Dual Media, down-flow		
Hydraulic Loading Rate	gpm/sf	<3	3.0	1.8	2.7
Number of Units	-	>2	2	3	4
Filter Size, each	sf			140	
Filter Size, total	sf		280	420	560

10.1.7 Disinfection

It is planned to use chlorine for final disinfection. Final disinfection needs to occur downstream of the tertiary P removal filters and therefore, a new chlorine dosing system and chlorine contact tank must be built on-site upstream of the effluent storage tank. The capacity of the chlorination system will need to be upgraded to safely treat the projected design flows for all Permit Phases (Figure 1.9).

Per Chapter 30 TAC 217.281 (b) (1), the Chlorine Contact Basin must be sized to provide a minimum Cl_2 contact time of 20 minutes at the peak flow, meaning the peak 2-hour flow. The dosage requirements are based on the effluent type (Chapter 30 TAC 217.272 (b), Table K.1). For secondary effluent, the dose required is 8 mg/L, for tertiary or nitrified, it is 6 mg/L. Per discharge permit, a 1 mg/L chlorine residual must be maintained after a CT of 20 min.

Table 1.9	Conceptual BNR Design Criteria - Final Disinfection City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
Peak 2-hr Flow	mgd		1.6	1.99	3.98
Disinfection					
Oxidant	-			Gaseous chlorine	
Dosage	mg/L	>6 mg/L		> 6 mg/L	
Residual	mg/L	>1 mg/L		> 1 mg/L	
Chlorine Contact Basin					
Size	gal		30,000		60,000
HRT @ 2-hr PDF	min	>20	27	22	22

10.1.8 Process Monitoring and Control

BNR treatment for ultra-low nutrient limits requires a robust process monitoring and control support for reliable treatment and cost-effective process operation and chemical applications. During preliminary and detailed design the benefits of online instrumentation need to be further evaluated to reliably control e.g., DO concentrations in the aerated zones, effluent ammonia and nitrate, sludge blanket levels in the SCs, tertiary effluent phosphorous and turbidity. Effective and reliable process operation is also facilitated through automated electronic recording of such relevant data series. Per TAC, at minimum WAS and RAS flows need to be metered and controllable for enhanced BNR operation. The monitoring frequency of influent, effluent, and individual process operations will need to be increased to assure adequate BNR performance and chemical dosing. Specifically, aeration control and solids inventory management will need to be tightly controlled from day-to-day operation so ammonia and nitrate removal is adequately balanced.

10.1.9 Aerobic Digestion, Storage, and Sludge Hauling

Table 1.9 summarizes the WAS flow projections under ADMMF conditions in the Interim I and Interim II Phases at an aSRT of 6 days. The temperature in the sludge holding tanks is close to 18 °C in winter months.

Per 30 TAC 217, the volatile solids (VS) loading rate for aerobic digestion must be designed to be at least 100 lb but not more than 200 lb of VS per 1,000 cf per day. The DO concentration maintained in the liquid must be at least 0.5 mg/L. Energy input for mixing

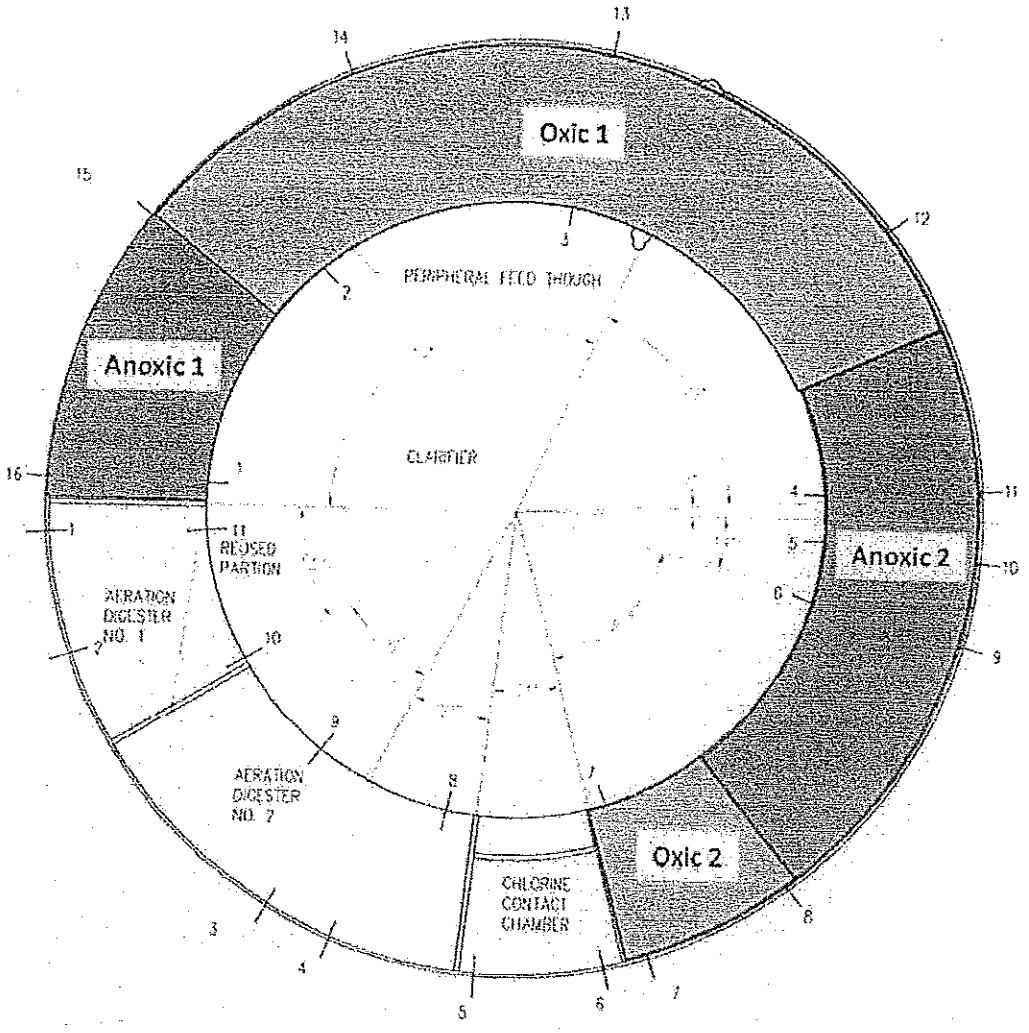
must be at least 20 scfm per 1,000 cf of aeration tank if diffused air mixing is used. The minimum HRT for staged aerobic digestion at 20 degrees is 28 days and for non-staged aerobic digestion 40 days. As the volume in the tanks does not meet the aerobic digester requirements, the tanks are serving as sludge holding tanks (see Table 1.10).

Table 1.10 Conceptual BNR Design Criteria - Sludge Holding Tanks
City of Dripping Springs Conceptual BNR Design
CMA Engineering, Inc.

Criteria	Units	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Waste Activated Sludge					
Flow at ADMMF in winter (100%)	gpd		10,000	11,000	22,000
Proportionally Scaled:					
75%	*gpd*		*7,500*	*8,250*	*16,500*
50%	*gpd*		*5,000*	*5,500*	*11,000*
25%	*gpd*		*2,500*	*2,750*	*5,500*
TSS concentration	%			1.0	
VSS Load	ppd		526	655	1,310
Sludge Holding Tanks					
Number of Basins (existing)	-		3		6
Total Volume[1)]	gal		135,150		270,300
	1,000 cf		18.1		36.1
HRT at ADMMF	days	[2)]	13.5	12.3	12.3
VSS Loading Rate	*ppd/*	100 - 200 lb per 1,000 cf per day	29.1	36.2	

Notes:
1. The total shown here includes the volume currently being used for chlorine contact in the existing treatment train and assumes that new chlorine contact basins will be constructed.
2. The minimum HRT for staged aerobic digestion at 20 degrees is 28 days and for non-staged aerobic digestion 40 days. As the volume does not meet the aerobic digester requirements, the tanks are serving as sludge holding tanks.

As an alternative to meeting minimum criteria for aerobic digestion, the existing permit allows for alternative options for disposal of solids that are not dewatered, and it is assumed that these options will remain available in the future. Under the current hauling procedure



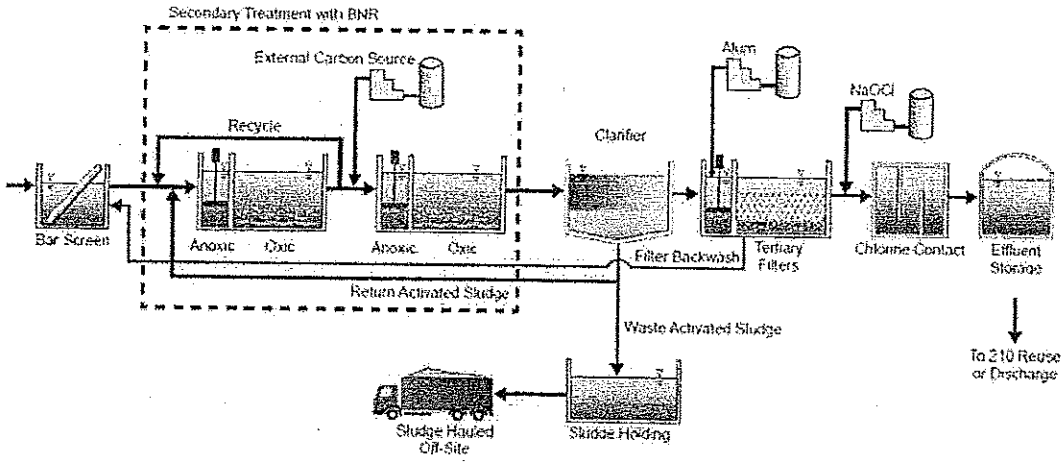
Background image provided by CMA Engineering, Inc.

PROPOSED AERATION BASIN CONFIGURATION (PLAN VIEW)

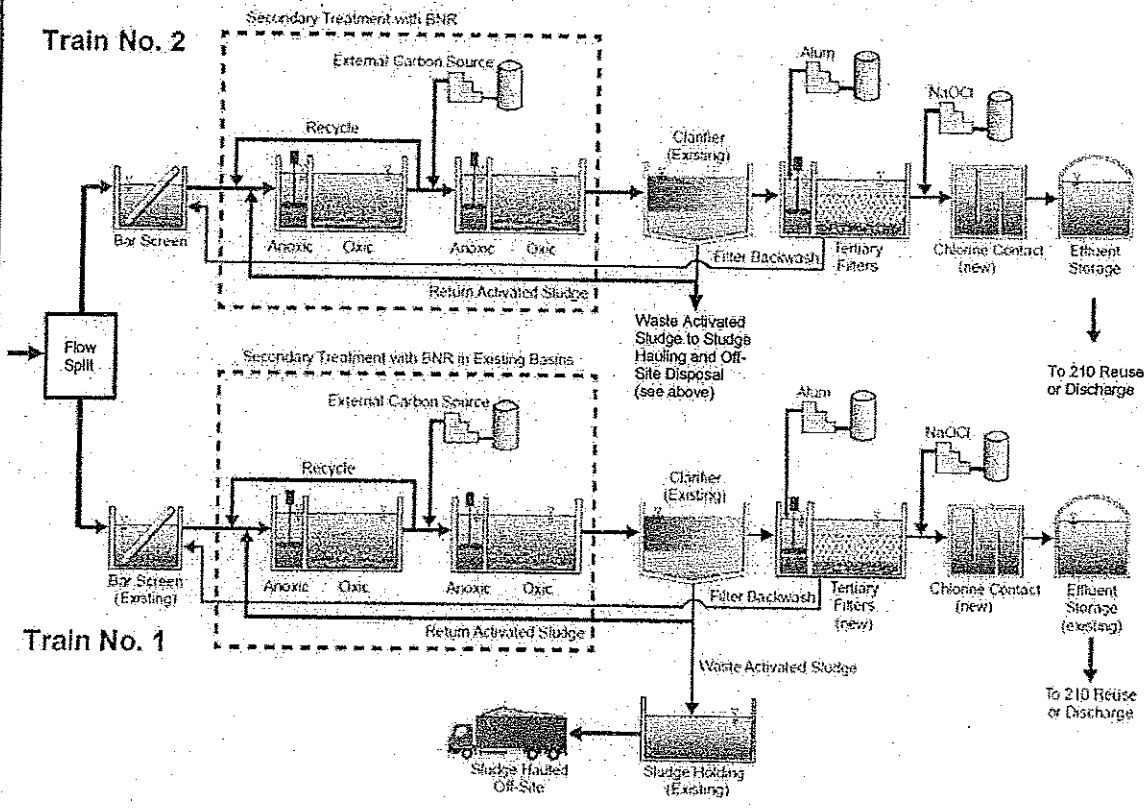
FIGURE 1.12

CMA ENGINEERING, INC
CITY OF DRIPPING SPRINGS CONCEPTUAL BNR DESIGN

Train No. 2 Constructed for Interim Phase I and Interim Phase II:



Existing Train No. 1 Retrofitted to Complete Final Phase:



REVISED PROCESS FLOW DIAGRAM FOR SOUTH REGIONAL WASTEWATER TREATMENT PLANT WITH BNR UPGRADES

Revised FIGURE 1.11

CMA ENGINEERING, INC.
CITY OF DRIPPING SPRINGS
CONCEPTUAL BNR DESIGN

6. Closure Plans

(Instructions, Page 51)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☐ Yes ☒ No

If yes, was a closure plan submitted to the TCEQ?

☐ Yes ☐ No

If yes, provide a brief description of the closure and the date of plan approval.

N/A

7. Permit Specific Requirements

(Instructions, Page 52)

a. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☒ Yes ☐ No

If yes, provide the date(s) of approval for each phase: 6/18/2007

For applicants with an existing permit: Check the *Other Requirements* or *Special Provisions* of the existing permit and provide information below (including dates) on any actions taken to meet an *Other Requirement* or *Special Provision* pertaining to the submission of a summary transmittal letter, if applicable. Also, if in possession of an approval letter from the TCEQ, provide a copy.

The approval letter is for the current City of Dripping Springs Permit No. WQ0014488001 WWTP in operation. It is the same facility that will be retrofitted for Permit Number WQ0014488003.

8. Pollutant Analysis of Treated Effluent

(Instructions, Page 57) See Attachment 9

Provide an analysis of the treated effluent for the following pollutants (data must be sampled within 1 year of application submission) in the table below. Effluent data is not required for new permit applications unless the facility is in operation. For ***water treatment facilities*** discharging filter backwash water, use the second table below.

Table 1.0(5) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	3.0	25	186	Grab	Jan 2012 - Sep 2015
Total Suspended Solids, mg/l	3.2	29	186	Grab	Jan 2012 - Sep 2015
Ammonia Nitrogen, mg/l	7.1	46	165	Grab	May 2014 - Sep 2015
Nitrate Nitrogen, mg/l	11.0	55	163	Grab	May 2014 - Sep 2015
Total Kjeldahl Nitrogen, mg/l	8.2	46	164	Grab	May 2014 - Sep 2015
Sulfate, mg/l	24.1		1	Grab	October 8, 2015
Chloride, mg/l	222		1	Grab	October 8, 2015
Total Phosphorus, mg/l	6.94		1	Grab	October 8, 2015
pH, standard units	7.4		1	Grab	October 8, 2015
Dissolved Oxygen, mg/l	8.2		1	Grab	October 8, 2015
Chlorine Residual, mg/l	3.1		1	Grab	October 8, 2015
E.coli (colonies per 100ml) freshwater					
Entercocci (colonies per 100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	964		1	Grab	October 8, 2015
Electrical Conductivity, µmohs/cm	1460		1	Grab	October 8, 2015
Oil & Grease, mg/l	< 5.2		1	Grab	October 8, 2015
Alkalinity ($CaCO_3$), mg/l	79.8		1	Grab	October 8, 2015

Table 1.0(6) - Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, std. units					
Fluoride, mg/l					

Table 1.2	Wastewater Influent Load and Concentration Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.			
	Existing Flows (Jan to Aug 2014)[1]	Interim I Phase	Interim II Phase	Final Phase
Influent Design Flows				
AADF, mgd	63,650	270,000	316,670	633,330
ADMMF, mgd (Permitted Flow)	92,590	399,000	497,500	995,000
Annual Average Daily Design Concentrations[2]				
Five-day biological oxygen demand (BOD_5), mg/L	227		227	
TSS, mg/L	NA[6]		250	
TKN, mg/L	53		53	
Ammonia nitrogen (NH_3-N), mg/L	38.6		38.6	
Total phosphorus (Total P), mg/L	6.9		6.9	
Annual Average Daily Design Loads[3]				
BOD_5, ppd	116 (±64.5)	510	600	1,200
TSS, ppd	NA	560	660	1,320
TKN, ppd	27.1 (±12.5)	120	140	280
NH_3-N, ppd	19.7 (±8.8)	87	100	200
Total P, ppd	3.5 (±1.8)	15.5	18.2	36.5
Maximum Month Design Concentrations[4]				
BOD_5, mg/L	241		241	
TSS, mg/L	NA		265	
TKN, mg/L	57		57	
NH_3-N, mg/L	39		39	
Total P, mg/L	7.2		7.2	

Average Influent Loading (lbs/day = total average flow x average BOD_5 conc. X 8.34)

1,200 lb BOD/day

Provide the source of the average organic strength or BOD_5 concentration.

City of Dripping Springs Influent Data See Attachment 7

If the increased flow will impact the existing organic strength, the following table must be completed.

c. Proposed organic loading

This table must be completed if applying for a new permit or if increased flow will impact organic loading.

Table 1.1(4) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD_5 Concentration (mg/l)
Municipality		City of DS Influent Data
Subdivision		See Attachment 7, Table 1.2
Trailer park – transient		of Carollo Engineers
Mobile home park		Technical Memorandum No. 1
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW		
AVERAGE BOD_5		

CITY OF DRIPPING SPRINGS
SOUTH REGIONAL WASTEWATER SYSTEM
HAYS COUNTY, TEXAS
WASTEWATER SYSTEM EXPNASION
PRELIMINARY ENGINEERING REPORT
NEW PERMIT APPLICATION

1.0 INTRODUCTION

The City of Dripping Springs (City) is pursuing a new Texas Pollutant Discharge Elimination System (TPDES) Permit for the expansion of it South Regional Wastewater System. The purpose of the new permit is to increase capacity of the City's South Regional Wastewater System and change its method of effluent disposal to accommodate growth in the Dripping Springs area. It's existing permitted capacity is 162,500 GPD via subsurface land application permit (TCEQ Permit Number WQ0014488001), and has an amendment pending to increase capacity via surface irrigation to 348,500 GPD. The City proposes to construct a new WWTP and increase the capacity of its existing WWTP, abandon the subsurface drip irrigation requirement from their existing permit, and convert the surface irrigation areas in the permit pending at the TCEQ to 30 TAC, Chapter 210 reuse, and discharge treated effluent to Walnut Springs, a tributary to Onion Creek.

The City is continuing to receive requests and inquiries for wastewater service within and outside of its existing service area. These include requests from developers of several large tracts located outside the existing service area that have obtained or are pursuing their own wastewater permits for onsite treatment and land application.

Additionally, the City will pursue Beneficial Reuse Authorization through 30 TAC, Chapter 210, which would allow the City to reuse treated effluent for irrigation on City-owned park lands and athletic fields, and potential irrigation of other privately owned areas (i.e., parks, greenbelts, pasture lands, etc.) to conserve treated surface water and/or groundwater resources. The City-owned park land and athletic fields, and other parks in the area currently utilize treated surface water from the West Travis County Public Utility Agency (WTCPUA) and groundwater from the Drippings Springs Water Supply Corporation (DSWSC) potable water systems. Other future reuses could be Direct Potable Reuse to supplement the existing treated surface water and/or groundwater supplies.

The City's existing South Regional Wastewater Treatment Plant is located along FM 150 approximately 0.55 miles east of Ranch Road 12 in Dripping Springs, Texas. The proposed discharge point is within the Caliterra Development located along the west side of Ranch Road 12 ("RR12") approximately 1.5 miles south of U.S. Highway 290, and immediately northwest of the Ranch Road 150 and Ranch Road 12 intersection in Dripping Springs, Texas (see Figure 1 for a Vicinity Map). The proposed WWTP would be located at the existing WWTP site.

2.0 PROPOSED HYDRAULIC AND ORGANIC WASTEWATER LOADINGS

2.1 Estimated Flows and Permit Phases

Flow projections from the CMA Engineering, Inc. (CMA) July 2013 Preliminary Engineering Planning Report for South Regional Wastewater System Expansion Planning were updated and used to establish phasing for the permit application. The City proposes to utilize new outfall (a tributary to Onion Creek) in the Caliterra Subdivision. The proposed permit will allow the City to provide wastewater service to the proposed Caliterra development and the Greater City of Dripping Springs Area.

A wastewater production rate of 175 GPD/LUE was used to establish capacity requirements for the City's wastewater treatment and disposal facilities. CMA Engineering, Inc. has found that the 175 GPD/LUE is typical of other residential subdivisions in the Dripping Springs area. Table 1 presents the summary of the estimated wastewater flow projections. Figure 2 is a Graph of the Wastewater Flow Projections.

The City is proposing three permit phases. The proposed Interim I Phase is 0.399 MGD and allows the City of operate the new WWTP in accordance with 30 TAC, Chapter 217.153(c) that requires that WWTPs over 0.400 MGD to have two aeration basins and two clarifiers for redundancy. This will allow the City to continue to grow while the existing WWTP is being retrofitted. The proposed Interim II Phase is 0.4975 MGD. If needed, it is hopeful that the TCEQ will grant the City a variance to 30 TAC, Chapter 217.153(c) during the retrofit of the existing WWTP allow the City to continue to keep growing. The proposed Final Phase is 0.995 MGD. Based on the conceptual design of the WWTP performed by Carollo Engineers (Carollo), the existing WWTP can be converted to a Biological Nutrient Removal (BNR) WWTP at the proposed permit phase capacities and meet the proposed effluent parameters. The Conceptual Design Engineering Report is included in Appendix A. The proposed permit phases are summarized below.

Interim I Phase:	0.399 MGD
Interim II Phase:	0.4975 MGD
Final Phase:	0.995 MGD

2.2 Peak Flow Rate

The peak flow to the WWTP is defined as the highest two-hour average flow rate expected to be delivered to the treatment units under any operational condition. It is proposed that influent flows will gravity flow to the WWTP influent lift stations, and then pumped from lift stations to the WWTP headworks. The peak factor used for the preliminary design of the WWTP is 4.0.

Lisa Iroanya

From: Lisa Iroanya
Sent: Monday, December 07, 2015 9:41 AM
To: 'Robby Callegari'
Subject: Application for Proposed Wastewater Permit WQ0014488003 is Administratively Complete
Attachments: Municipal Discharge New - spanish.docx; 20244-NORI PNV FORM 10-24-12.docx; 0014488003CityofDrippingSpringsNORIcopy.docx

Mr. Callegari,

I have attached the amended courtesy copy of the public notice documents. The official hard copy will also be sent by regular mail from our Chief Clerk's office. Please review courtesy copy beforehand for correctness, should you chose to publish off the courtesy copy. Please contact me if you have any questions or should find any discrepancies with the notice documents.

Thanks,

Lisa Iroanya
License & Permit Specialist IV
Application Review & Processing Team
Water Quality Division
Texas Commission on Environmental Quality
Lisa.Iroanya@tceq.texas.gov
P: 512-239-4418
F: 512-239-4430

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 9, 2015

Mr. Robert Callegari, P.E.
CMA Engineering, Inc.
235 Ledge Stone Drive
Austin, Texas 78737

Re: City of Dripping Springs – Application for New TPDES Permit No. WQ0014488003 (CN602491284; RN104005434)

Dear Mr. Callegari:

Thank you for your application for the above-referenced facility which was received on October 20, 2015. A preliminary technical data completeness review of the application was completed.

Please address the comments in Attachment 1 of this letter and provide a response, addressed to my attention, by December 7, 2015.

If you have any comments or questions, please contact me at (512) 239-4608 or if by correspondence, include MC 148 in the letterhead address following my name.

Sincerely,

Julian D. Centeno, Jr., P.E., Permit Coordinator
Municipal Permits Team
Wastewater Permitting Section (MC 148)
Water Quality Division

JDC/ml

Enclosure

cc: Ms. Ginger Faught, Deputy City Administrator, City of Dripping Springs, P.O. Box 384, Dripping Springs, Texas 78620

Attachment 1
City of Dripping Springs
Permit No. WQ0014488003

Technical Report Data Completeness Review - Domestic Wastewater Permit Application

Please address the following item(s):

1. Items 2(a) and (b) page 23 of the administrative report 1.1: To complete the application, we need for you to please confirm that the buffer zone map includes all facilities in all proposed phases.

2. Item 3(b) on page 2 of the technical report 1.0: For clarity, we need for you to please summarize the number of units and dimensions per phase. Is the new facility proposed for Interim I the same as the facility for Interim II phase?

3. Item 3(c) on page 3 of the technical report 1.0: For clarity, we need for you to please provide a separate flow diagram per phase.

4. Item 6 page 4 of the technical report 1.0: Please respond "N/A", if not applicable.

5. Item 7 page 4 of the technical report 1.0: The response indicates plans and specifications approval. This would not apply because a new facility plus a retrofitted facility are proposed for a new TPDES permit.

6. Item 8 on page 11 of the technical report 1.0: The entries are inconsistent with the application because a new facility plus a retrofitted facility are proposed for a new TPDES permit.

7. Items 2(a) and (c) on pages 22-23 of the technical report 1.1: Since the application is for a new permit, Table 1.1(4) should be completed.

8. Preliminary Engineering Report (Attachment 7): In the Introduction, the first sentence states that the City is "pursuing a new Texas Pollutant Discharge Elimination System (TPDES) Permit Amendment . . ." Please correct this to say just a new permit without the term "amendment."

If you should have any questions regarding the above-requested item(s), please contact Julian D. Centeno, Jr. of the Municipal Permits Team at (512) 239-4608.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 7, 2015

Mr. Robert Callegari, P.E.
CMA Engineering, Inc.
235 Ledge Stone Drive
Austin, Texas 78737

RE: Declaration of Administrative Completeness
Applicant Name: City of Dripping Springs (CN602491284)
Proposed Permit No.: WQ0014488003 (EPA I.D. No. TX0136778)
City of Dripping Springs South Regional Wastewater Facilities (RN104005434)
Type of Application: New

Dear Mr. Callegari:

The executive director has declared the above referenced application, received on October 20, 2015 administratively complete on December 7, 2015.

You are now required to publish notice of your proposed activity and make a copy of the application available for public review. The following items are included to help you meet the regulatory requirements associated with this notice:

- Instructions for Public Notice
- Notice for Newspaper Publication
- Public Notice Verification Form
- Publisher's Affidavits

You must follow all the directions in the enclosed instructions. The most common mistakes are the unauthorized changing of notice, wording, or font. If you fail to follow these instructions, you may be required to republish the notices.

The following requirements are also described in the enclosed instructions. However, due to their importance, they are highlighted here as well.

1. Publish the enclosed notice within **30 calendar days** after your application is declared administratively complete. (See this letter's first paragraph for the declaration date.) **You may be required to publish the notice in more than one newspaper, including a newspaper published in an alternative language, to satisfy all of the notice requirements.**

2. On or before the date you publish notice, place a copy of your permit application in a public place in the county where the facility is or will be located. This copy must be accessible to the public for review and copying, must be updated to reflect changes to the application, and must remain in place throughout the comment period.

3. For each publication, submit proof of publication of the notice that shows the publication date and newspaper name to the Office of the Chief Clerk within **10 business days** after notice is published in the newspaper.

4. Return the original enclosed Public Notice Verification and the Publisher's Affidavits to the Office of the Chief Clerk within **30 calendar days** after the notice is published in the newspaper.

If you do not comply with all the requirements described in the instructions, further processing of your application may be suspended or the agency may take other actions.

If you have any questions regarding publication requirements, please contact the Office of the Chief Clerk at (512) 239-3300. If you have any questions regarding the content of the notice, please contact Lisa Iroanya at (512) 239-4418.

Sincerely,

Deirdre Shepphard, Team Leader
Applications Review and Processing Team (MC-148)
Water Quality Division

DS/ LI

Enclosures

cc: TCEQ Region 11, Water Program Manager

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INSTRUCTIONS FOR PUBLIC NOTICE

For Water Quality Permit (Renewal/Amendment/New)

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN PERMIT (NORI)

Your application has been declared administratively complete and now you must comply with the following instructions:

Please Review Notice

Included in the notice is all of the necessary information. Please read it carefully and notify Lisa Iroanya immediately if it contains any errors or omissions. You are responsible for ensuring the accuracy of all information published. You may not change the text or formatting of the notice without prior approval from the TCEQ. Changing the text or formatting of the notice may require new publication at your expense and delay processing of your application. There are nine steps involved in publishing notice. Complete each step.

Newspaper Notice

1. **You must publish the enclosed Notice of Receipt of Application and Intent to Obtain Permit within 30 calendar days after the date of administrative completeness. Refer to the cover letter for the date of administrative completeness.**

   - You must publish the enclosed Notice of Receipt of Application and Intent to Obtain Permit at your expense, at least once in the newspaper of largest circulation within each county where the facility is or will be located or, if the facility is located or will be located in a municipality, at least once in a newspaper of general circulation in the municipality.
   - If the discharge point or potential discharge point is located in a different county than the facility, you must publish the enclosed Notice of Receipt of Application and Intent to Obtain Permit at your expense, in a newspaper that is of the largest circulation within each county.
   - These requirements may be satisfied by one publication if the newspaper meets all of the above requirements.
   - The bold text of the enclosed notice must be printed in the newspaper in a font style or size that distinguishes it from the rest of the notice (i.e., **bold,** *italics*). **Failure to do so may require re-notice.**

Alternative Language Notice

2. You must publish notice in an alternative language if the following criteria are met:

- If either the elementary or middle school nearest to the facility or proposed facility is required to provide a "bilingual education program" (BEP), as required by Texas Education Code (TEC), Chapter 29, Subchapter B, and 19 TAC §89.1205(a) and one of the following conditions is met:
  1. students are enrolled in a program at that school;
  2. students from that school attend a bilingual education program at another location; or
  3. the school that otherwise would be required to provide a bilingual education program has been granted an exception from the requirements to provide the program as provided for in 19 TEX. ADMIN. CODE §89.1207(a).
- A "bilingual education program" as required by the TEC is different from an "English as a second language program" (ESL). An ESL program alone, will not require public notice in an alternative language.
- If triggered, you must publish the notice in the alternative language taught in the bilingual education program. You must publish this notice in a newspaper or publication primarily published in that alternative language. The newspaper or publication must be of general circulation in the county in which the facility is located or proposed to be located. If the facility is located or proposed to be located in a municipality, and there exists a newspaper or publication of general circulation in the municipality, you must publish the notice only in the newspaper or publication in the municipality.
- You must demonstrate a good faith effort to identify a newspaper or publication in the required language. If there is no general circulation newspaper or publication printed in such language, then publishing in that language is not required. Publication in an alternative language section or insert within a large publication which is not printed primarily in that alternative language does not satisfy these requirements.
- You have the burden to demonstrate compliance with these requirements. To assist you in meeting these requirements, the TCEQ has provided a Public Notice Verification Form (enclosed). You must fill out the attached Public Notice Verification Form indicating your compliance with the requirements regarding publication in an alternative language.
- If you are required to publish notice in Spanish, you must translate the site-specific information in the notice that is specific to your application, at your own expense. You may then insert the Spanish translation of your site-specific information into a Spanish template developed by the TCEQ. You may obtain the electronic version of the Spanish template from the TCEQ website at www.tceq.state.tx.us/nav/permits/wqspanish_nori.html
- If you are required to publish notice in a language other than Spanish, you must translate the entire public notice, at your own expense.

Proof of Publication

Check each publication to ensure that the notices were accurately published. If a notice was not published correctly you may have to republish.

3. **You must submit proof of publication for each newspaper that shows the notice, the date of publication, and the name of the newspaper to the Office of the Chief Clerk within 10 business days after the date of publication. Acceptable proof of publication is a copy of the published notice or the original newspaper clipping of the published notice. If you choose to submit a copy of the published notice to the Office of the Chief Clerk, the copy must be on standard-size 8 ½" x 11" paper and must show the actual size of the published notice (do not reduce the image when making copies). Please note, submitting a copy of your published notice could result in faster processing of your application. It is recommended that you maintain original newspaper clippings or tear sheets of the notice for your records.**

4. **For each newspaper notice, you must submit an original Publisher's Affidavit to the Office of the Chief Clerk within 30 calendar days after the date of publication. For each required published notice, you must use the appropriate Publisher's Affidavit form that is enclosed with these instructions. The affidavit must clearly identify the applicant's name and permit number. Note: On occasion, newspapers have attempted to provide applicants their own affidavit. The newspaper's affidavit will not be accepted by the Office of the Chief Clerk.**

   - You are encouraged to submit the Publisher's Affidavit with the proof of publication described above. However, the affidavit must be submitted no later than **30 calendar days** after publication of notice.

5. **You must fill out the attached Public Notice Verification form. This form must be submitted with the Publisher's Affidavit within 30 calendar days after publication of the notice.**

6. **The originals of the Publisher's Affidavit, the Public Notice Verification form, and acceptable proof of publication of the published notice must be mailed to:**

   TCEQ
   Office of the Chief Clerk, MC 105
   Attn: Notice Team
   P.O. Box 13087
   Austin, Texas 78711-3087

   - Please ensure that all affidavits sent to the Chief Clerk are originals and that all blanks on the affidavits are filled in correctly. Photocopies of affidavits will not be accepted.

Failure to Publish and Submit Proof of Publication

If you fail to publish the notice or submit proof of publication by the deadlines set forth above, the TCEQ may suspend further processing of your application or take other action.

Application in a Public Place

7. **You must put a copy of the administratively complete application in a public place for review and copying by the public. This public place must be**

located in the county where the facility is or proposed to be located, and was previously identified by you as the viewing location. (Note: The viewing location is set forth in the enclosed notice.)

- A public place is one that is publicly owned or operated (ex: libraries, county courthouses, or city halls).
- The administratively complete application must be available *beginning on the first day of newspaper publication and remain available for the publication's designated comment period.*

8. **During the technical review, you must update the publicly available application so that it includes all application revisions within 10 business days from the date the revision is transmitted to the TCEQ.**

9. **If the application was submitted to the TCEQ with information marked as confidential, you must indicate in the public copy of the application that there is additional information in a confidential file. These portions of the application must be accompanied with the following statement: "Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, Texas 78711-3087".**

General Information

When contacting the Commission regarding this application, please refer to the permit number at the top of the Notice of Receipt and Intent to Obtain Permit.

If you have any questions regarding publication requirements, please contact the Office of the Chief Clerk at 512-239-3300. If you have any questions regarding the content of the notice, please contact Lisa Iroanya at (512) 239-4418.

If you wish to obtain an electronic copy of the English version of this notice, please visit our web site at http://www.tceq.texas.gov/agency/cc/cc_db.html or http://www.tceq.texas.gov/agency/cc/eda.html. Please be aware that formatting codes may be lost and that any notices downloaded from these web sites must be reformatted by you so that your downloaded copy looks like the notice document you received from us.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT

PROPOSED PERMIT NO. WQ0014488003

APPLICATION. City of Dripping Springs, P.O. Box 384, Dripping Springs, Texas 78620, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0014488003 (EPA I.D. No. TX0136778) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 995,000 gallons per day. The domestic wastewater treatment facility is located at 23127 Ranch Road 150, Dripping Springs, in Hays County, Texas 78620. The discharge route is from the plant site via pipe to Walnut Springs; thence to Onion Creek. TCEQ received this application on October 20, 2015. The permit application is available for viewing and copying at Dripping Springs City Hall, Front Desk, 511 Mercer Street, Dripping Springs, Texas. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application. http://www.tceq.texas.gov/assets/public/hb610/index.html?lat=30.154166&lng=-98.08&zoom=13&type=r

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

CHANGE IN LAW: The Texas Legislature enacted Senate Bill 709, effective September 1, 2015, amending the requirements for comments and contested case hearings. This application is subject to those changes in law.

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting

public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing.** A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

AGENCY CONTACTS AND INFORMATION. All written public comments and requests must be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or electronically at www.tceq.texas.gov/about/comments.html. If you need more information about this permit application or the permitting process, please call TCEQ Public Education Program, Toll Free, at 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040. General information about TCEQ can be found at our web site at www.tceq.texas.gov.

Further information may also be obtained from City of Dripping Springs at the address stated above or by calling Mr. Robert Callegari,P.E., CMA Engineering, Inc. at 512-432-1000.

Issuance Date: December 7, 2015

TCEQ-OFFICE OF THE CHIEF CLERK
MC-105 Attn: Notice Team
P.O. BOX 13087
AUSTIN, TX 78711-3087

Applicant Name: City of Dripping Springs
Permit No.: WQ0014488003
Notice of Intent to Obtain Permit

PUBLISHER'S AFFIDAVIT
FOR WATER QUALITY PERMITS

STATE OF TEXAS §
COUNTY OF _____§

Before me, the undersigned authority, on this day personally appeared

_____ who being by me duly sworn, deposes
(name of person representing newspaper)

and says that **(s)**he is the_____
(title of person representing newspaper)

of the _____; that this newspaper is a newspaper of
(name of newspaper)

largest circulation in _____ County, Texas or is
(name of county)

a newspaper of general circulation in _____,
(name of municipality)

Texas; and that the enclosed notice was published in said newspaper on the following date**(s)**:

_____

_____
(newspaper representative's signature)

Subscribed and sworn to before me this the _____ day of _____,

20____.

(Seal)

_____
Notary Public in and for the State of Texas

_____
Print or Type Name of Notary Public

My Commission Expires _____

TCEQ-OFFICE OF THE CHIEF CLERK
MC-105 Attn: Notice Team
P.O. BOX 13087
AUSTIN, TX 78711-3087

Applicant Name: City of Dripping Springs
Permit No.: WQ0014488003
Notice of Intent to Obtain Permit

ALTERNATIVE LANGUAGE
PUBLISHER'S AFFIDAVIT

STATE OF TEXAS §
COUNTY OF _____ §

Before me, the undersigned notary public, on this day personally appeared

_____, who being by me duly sworn, deposes
(name of person representing newspaper)

and says that (s)he is the _____ of the
(title of person representing newspaper)

_____; that said newspaper is
(name of newspaper)

generally circulated in _____ County, Texas and
(same county as proposed facility)

is published primarily in _____ language; that the
(alternative language)

enclosed notice was published in said newspaper on the following date(s):

_____.

Subscribed and sworn to before me this the _____ day of _____,

20____, by _____
(newspaper representative's signature)

(Seal)

_____
Notary Public in and for the State of Texas

_____
Print or Type Name of Notary Public

My Commission Expires _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Public Notice Verification Form

Notice of Receipt of Application and Intent to Obtain Permit

(NORI)

Water Quality Permit

Applicant Name: _____

Site or Facility Name: _____

Water Quality Permit Number: _____

Regulated Entity Number: _____ Customer Number: _____

All applicants must complete all applicable portions of this form. The completed form must be sent to the TCEQ to the attention of the Office of the Chief Clerk. For more information regarding public notice refer to the instructions in the public notice package.

ALTERNATIVE LANGUAGE CHECKLIST

A. I have contacted the appropriate school district: Yes No

School District:_____ Phone: _____

Person Contacted:_____ Date:_____

B. A bilingual education program (BEP) is required by the Texas Education Code in the district? Yes No

If answer is NO, skip to 1st question in verification box on next page.
(Note: A BEP is different from an "English as a Second Language" ESL) program; and Elementary/Middle schools that only offer ESL will not trigger notice in an alternative language.)

A BEP is required in the District, and either:

1. Students in the elementary or middle school nearest the facility are enrolled in a program at that school. Yes No
2. Students from the elementary or middle school nearest the facility attend a BEP at another location. Yes No
3. The school district that otherwise would be required to provide a BEP has been granted an exception from the requirements to provide the program, as provided for in 19 TAC89.1207(a). Yes No

If the answer is YES to **1, 2, or 3** above, then alternative language notice is required.

If the answer is NO to all three **1, 2, and 3** above, then alternative language notice is not required.

C. The name of the elementary school nearest to the proposed or existing facility is:

_____

D. The name of the middle school nearest to the proposed or existing facility is:

_____

E. The following language(s) is/are utilized in the bilingual program:

_____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Public Notice Verification Form

Notice of Receipt of Application and Intent to Obtain Permit

(NORI)

Water Quality Permit

Applicant Name: _____

Site or Facility Name: _____

Water Quality Permit Number: _____

Regulated Entity Number: _____ Customer Number: _____

All applicants must complete all applicable portions of this form. The completed form must be sent to the TCEQ to the attention of the Office of the Chief Clerk. For more information regarding public notice refer to the instructions in the public notice package.

ALTERNATIVE LANGUAGE VERIFICATION

1. A BEP is required by the Texas Education Code in the area addressed by this permit application and is subject to alternative language public notice requirements. Yes No

   (If NO, skip 2 through 5 and complete signature, title, date, and name of applicant.)

2. The applicant has conducted a diligent search for a newspaper or publication of general circulation in both the municipality and county in which the facility is located (or proposed to be located.) Yes No

3. A newspaper or publication could not be found in any of the alternative language(s) in which notice is required. Yes No

4. The publishers of the newspapers listed below refused to publish the notice as requested, and another newspaper or publication in the same language and of general circulation could not be found in the municipality or county in which the facility is located (or proposed to be located). Yes No

   Newspaper:_____ Language:_____

5. Original tear sheets of the newspaper alternative language notice(s) and the requested affidavits have been sent to the TCEQ. Yes No

Verified by *(signature)*: _____ **Applicant:**_____

Title:_____ **Date:**_____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Public Notice Verification Form

Notice of Receipt of Application and Intent to Obtain Permit

(NORI)

Water Quality Permit

t Name: _____

acility Name: _____

Quality Permit Number: _____

ted Entity Number: _____ Customer Number: _____

licants must complete all applicable portions of this form. The completed form must t to the TCEQ to the attention of the Office of the Chief Clerk. For more information ling public notice refer to the instructions in the public notice package.

WATER QUALITY PERMIT NOTICE VERIFICATION

of publication for each newspaper that shows the notice, the date of publication and the of the newspaper, along with the requested affidavits; have been furnished in accordance the regulations and instructions of the TCEQ. Yes No

ice of Receipt of Application and Intent to Obtain Permit (1st Notice):

py of the complete water quality application, and any revisions, are available for review and ying beginning on the 1st day of publication of the NORI at the public place indicated below. documents will remain available for the publications' designated comment period. Yes No

ame of Public Place: _____

ddress of Public Place: _____

erified by (*signature*): _____ **Date:** _____

itle: _____

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECIBO DE LA SOLICITUD Y
EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA

PERMISO PROPUESTO NO. WQoo_____

SOLICITUD. *[Applicant's name and address]* ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQoo_____ (EPA I.D. No. TX _____) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar [*activity or facility being authorized]* la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de _____ galones por día]. La planta de *[type of facility, choose appropriate* tratamiento de aguas residuales domésticos or tratamiento de agua potable está ubicada _____ [*plant site location]* en el Condado de _____, Texas. La ruta de descarga es del sitio de la planta a _____ [descripción escrita de la ruta de descarga]. La TCEQ recibió esta solicitud el _____ *[date received].* La solicitud para el permiso está disponible para leerla y copiarla en _____ *[street address of public place in county in which facility is located].* Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
[Insert web link from English notice]

[Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary and is an application for a new facility, a major amendment which will increase the pollutant loads to coastal waters or would result in relocation of an outfall to a critical areas, or a renewal with such a major amendment. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange. If the application is for amendment that does not meet the above description or a renewal without such a major amendment, do not include the sentence: La solicitud está sujeto a las metas y políticas del Programa de Administración Costero de Texas y debe ser constante con las metas y políticas aplicables del Programa de Administración Costero.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la**

lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA PEDIR UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO, USTED DEBE INCLUIR EN SU PEDIDO LOS SIGUIENTES DATOS: su nombre; dirección; teléfono; nombre del solicitante y número del permiso; la ubicación y la distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; y la declaración "[Yo/nosotros] solicito/solicitamos un/a audiencia administrativa de lo contencioso". Si presenta por parte de un grupo o asociación el pedido para una audiencia administrativa de lo contencioso, debe identificar el nombre y la dirección de una persona que representa al grupo para recibir correspondencia en el futuro; debe identificar un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; debe proveer la información ya indicada anteriormente con respecto a la ubicación del miembro afectado y la distancia de la planta o actividad propuesta; debe explicar como y porqué el miembro sería afectado y como los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de los períodos para los pedidos y comentarios, el Director Ejecutivo enviará la solicitud y los pedidos para reconsideración o por una audiencia administrativa de lo contenciosos a los Comisionados de la TCEQ para su consideración en una reunión programada de la Comisión.

La Comisión otorgará solamente un audiencia administrativa de lo contencioso sobre los hechos reales disputados del caso que son pertinentes y esenciales para la decisión de la Comisión sobre la solicitud. Además, la Comisión sólo otorgará una audiencia administrativa de lo contencioso sobre los asuntos que fueron presentados antes del plazo de vencimiento y que no fueron retirados posteriormente.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia

administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los pedidos para una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.state.tx.us/about/comments.html. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.state.tx.us.

También se puede obtener información adicional del _____ *[nombre del solicitante]* a la dirección indicada arriba o llamando a _____ *[nombre del representante del solicitante]* al _____ *[número telefónico del solicitante].*

Fecha de emisión _____

CMA Engineering, Inc.

Firm No. F-3053

Robert P. Callegari, P.E.
Felix J. Manka, P.E.

November 23, 2015

Lisa Iroanya
Water Quality Division (MC 148)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: City of Dripping Springs
TCEQ Major Permit Amendment Application
TPDES Permit Number WQ0014488003
Response to October 29, 2015 Comment Letter
CMA Job Number 1695-001

Dear Ms. Iroanya:

Comment 1: Item. 2 on page 6 of the Administrative Report: Thank you for providing the billing address. However, due to an omission in the application, the applicant's name is not requested. For that reason, the billing contact name is still required. Please resubmit the corrected page with the billing contact's name.

Response 1: Attached is a revised page 6 of the Administrative Report.

Comment 2: Item 6. e. 5. on page 11 of the Administrative Report: You indicated that there is a bilingual program at the nearest elementary or middle school, however, you did not provide the language spoken. Please resubmit the corrected page with the language spoken.

Response 2: Attached is a revised page 11 of the Administrative Report.

Comment 3: Item 7. Section A. on page 12 of the Administrative Report: We were unable to verify address of 23127 Ranch Road 150, Dripping Springs, Texas 78620 with the US Postal Service. Please confirm that the address provided is a valid address and resubmit the corrected page or indicate if this is a 911 address in your cover letter.

Response 3: 23127 Ranch Road 150, Dripping Springs, Texas 78620 is the 911 address for the WWTP. The mailing address for WWTP correspondences is the City of Dripping Springs address listed in Item 1 on page 2 of the Administrative Report.

Comment 4: Signature page on page 14 of the Administrative Report: Thank you for submitting the signature page, however, the page was not correctly notarized. The notary wrote their name in the space after the statement "Subscribed and Sworn to before me by the said..." Please resubmit the corrected signature page with Mr. Todd Purcell's name in the appropriate space. Please ensure that the signature page bears the notarized, original, wet ink signature of Mr. Purcell.

Response 4: Attached is a new signature page of the Administrative Report correctly notarized.

235 Ledge Stone Dr.
Phone: (512) 432-1000

Austin, Texas 78737
Fax: (512) 432-1015

Comment 5: Item 1. a. on page 21 of the Administrative Report: Thank you for submitting the landowner's map however, there us additional information required. Tracts 5-7 all merge together. These tracts must have their boundaries clearly defined. Please see the attached map and clarify the boundaries or the following tracts highlighted in yellow and resubmit the landowner's map.

Response 5: Attached is a new landowner's map and cross-referenced list of affected landowners.

Comment 6: Item 1. b. on page 22 of the Administrative Report Worksheet 1.1: You submitted the cross-referenced list of affected landowners; however you did not submit the names and addresses in the Avery 5160 label format. Please submit another CD with the landowner mailing labels listed in the Avery 5160 label format (3 columns across, 10 columns down, for a total of 30 labels per page). Additionally, the name and addresses must follow the format required by the Commission. Each letter in the name and address must be capitalized, contain no punctuation, and the appropriate two character abbreviation must be used for the state as shown below:

NAME
ADDRESS
CITY ST ZIP

Response 6: Enclosed is a disk with a cross-referenced list of affected landowners in the Avery 5160 label format.

Comment 7: Item 3. b. on page 2 of the Technical Report: You indicated that there was an attachment that listed the treatment water types, the number of units and the dimensions in (Length x Width x Diameter). However, the required information is not listed. Please complete the table with the treatment unit types, number of units and dimensions.

Response 7: Attached are a Summary of Treatment Units and excerpts (Tables 1.5, 1.6, 1.7, 1.8, 1.9, and 1.10; and Figure 1.12) from the Carollo Engineers Technical Memorandum No. 1 included in Attachment 7.

Comment 8: Item 8 on page 11 of the Technical Report: The pollutant analysis table is not complete. Please provide a completed pollutant analysis.

Response 8: Attached is a revised page 11 of the Technical Report and copies of the Analytical Reports.

Comment 9: The following is a portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit. Please read it carefully and indicate if it contains any errors or omissions.

Response 9: Please include the location of the WWTP in the notice. Enclosed is a revised page 12 of the Administrative Report describing the location of the WWTP.

If you have any questions or comments regarding these responses or application, please contact me at 512-432-1000.

Sincerely,

Robert P. Callegari, P.E.
Principal

Xc: Ginger Faught, City of Deputy City Administrator
Andy Barrett, Andy Barrett & Associates, PLLC
David Tuckfield, City of DS Wastewater Attorney
James Miertscin Ph.D., P.E., James Miertschin & Associates, Inc.
Eva Steinle-Darling, Ph.D., P.E., Carollo Engineers, Inc.
Tanja Rauch-Williams, Ph.D., P.E., Carollo Engineers, Inc.
City Hall Public Viewing Binder

Is the billing address the same as the permittee or co-permittee?

☒ Permittee ☐ Co-permittee ☐ **No**, fill out this section

Prefix (Mr, Ms, Miss): Ms.

First/Last Name: Ginger Faught

Suffix (Jr, Sr, III): _____ Title: Deputy City Administrator Credential: _____

Phone No.: (512) 858-4725 Extension: _____

Fax No.: (512) 858- 5646 E-mail Address: gfaught@cityofdrippingsprings.com

Organization Name: City of Dripping Springs

Mailing Address: P.O. Box 384

Internal Routing (Mail Code, Etc.): _____

City: Dripping Springs State: TX ZIP Code: 78620

Mailing Information if outside USA

Territory: _____ Country Code: _____ Postal Code: _____

3. Application Contact Information

(Instructions, Page 28)

If TCEQ needs additional information regarding this application, who should be contacted?

a. First application contact

Prefix (Mr, Ms, Miss): Mr.

First/Last Name: Robert Callegari, P.E.

Suffix (Jr, Sr, III): _____ Title: Principal Credential: _____

Phone No.: (512) 432-1000 Extension: _____

Fax No.: 512-432-1015 E-mail Address: rcallegari@cma-engineering.com

Organization Name: CMA Engineering, Inc.

Mailing Address: 235 Ledge Stone Drive

Internal Routing (Mail Code, Etc.): _____

City: Austin State: TX ZIP Code: 78737

Mailing Information if outside USA

Territory: _____ Country Code: _____ Postal Code: _____

Check one or both: ☐ Administrative contact ☒ Technical Contact

3. Do the students at these schools attend a bilingual education program at another location?

☒ Yes ☐ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under *19 TAC §89.1205(g)*?

☐ Yes ☒ No

5. If the answer is yes to 1, 2, 3, or 4, public notice in an alternative language is required. Which language is required by the bilingual program?

Spanish

This section of the application is only used to determine if alternative language notice will be needed. Complete instructions on publishing the alternative language notice will be in your public notice package.

7. Regulated Entity and Permitted Site Information

(Instructions, Page 30)

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at:
http://www15.tceq.state.tx.us/crpub/index.cfm?fuseaction=regent.RNSearch

If the site is found, provide the assigned Regulated Entity Reference Number and provide the information for the site to be authorized through this application below. The site information for this authorization may vary from the larger site information.

TCEQ issued RE Reference Number (RN): **RN:** 104005434

a. State/TPDES Permit No.: WQ0014488003 Expiration date: _____

EPA Identification No. (TPDES Permits only): TX WQ0014488003

b. Name of project or site (the name known by the community where located):

City of Dripping Springs South Regional Wastewater Facilities

c. Is the facility located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County?

☒ Yes ☐ No

(**If Yes**, additional information concerning protection of the Edwards Aquifer may be required.)

d. Site location description information

Complete both sections, A and B. If the site does not have a physical address, check "No" in Section A and continue to Section B.

Section A: Site physical address.

Does the site have a physical address?

☒ Yes ☐ No

Verify the address with USPS and proceed to Section B below. If the address is not recognized as a delivery address, provide the address as identified for overnight mail delivery, 911 emergencies, or other online map tool to confirm an address.

Physical Address of Project or Site:

Street Number: 23127 Street Name: Ranch Road 150

City: Dripping Springs, TX ZIP Code: 78620

Section B: Site location information.

Is the location of the facility used in the existing permit correct?

☒ Yes ☐ No

If the location description is not accurate or this is a new permit application, provide a written location access description to the site:

The wastewater treatment facility will be located approximately 0.55 miles east of the intersection of Ranch Road 12 and Farm-to-Market Road 150 as measured along Farm-to-Market Road 150, and from that point approximately 1,000 feet south of Farm-to-Market Road 150.

(Ex.: located 2 miles west from intersection of Hwy 290 & IH35 accessible on Hwy 290 South)

e. City where the site is located or, if not in a city, what is the nearest city:

City of Dripping Springs

f. ZIP Code where the site is located: 78620

g. County where the site is located: Hays

h. Latitude: N 30° 9' 15.05" Longitude: W 98° 4' 48.93"

10. Signature Page

(Instructions, Page 39)

Permit Number WQ0014488003

Applicant City of Dripping Springs

Certification:

I/We certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under ***30 Texas Administrative Code §305.44*** to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Print or Type Signor's Name: Todd Purcell

Provide Signor's Title: Mayor, City of Dripping Springs

Signature *(Use blue ink)*: Todd Purcell

Date: 11-12-15

Subscribed and Sworn to before me by the said Todd Purcell

on this 12th day of November, 20 15.

My commission expires on the 13 day of MAY, 20 2018.

Notary Public Signature: Laurie Whipple [SEAL]

Hays County, Texas

LAURIE WHIPPLE
Notary Public, State of Texas
My Commission Expires
MAY 13, 2018

If co-permittees are necessary, each entity must submit an original, separate signature page.

RECEIVED
NOV 30 2015
Water Quality Division
Application Team

CITY OF DRIPPING SPRINGS
ADJACENT LAND OWNERS INFORMATION

1. Howard Integerity LTD
   23255 W FM 150
   Driftwood, TX 78619

2. b(6) [redacted]

3.

4.

5.

6. RPC Investments INC
   4412 Spicewood Springs Rd. Ste 300
   Austin, TX 78759

7. UMARI Partners LP
   509A W Lynn St.
   Austin, TX 78703

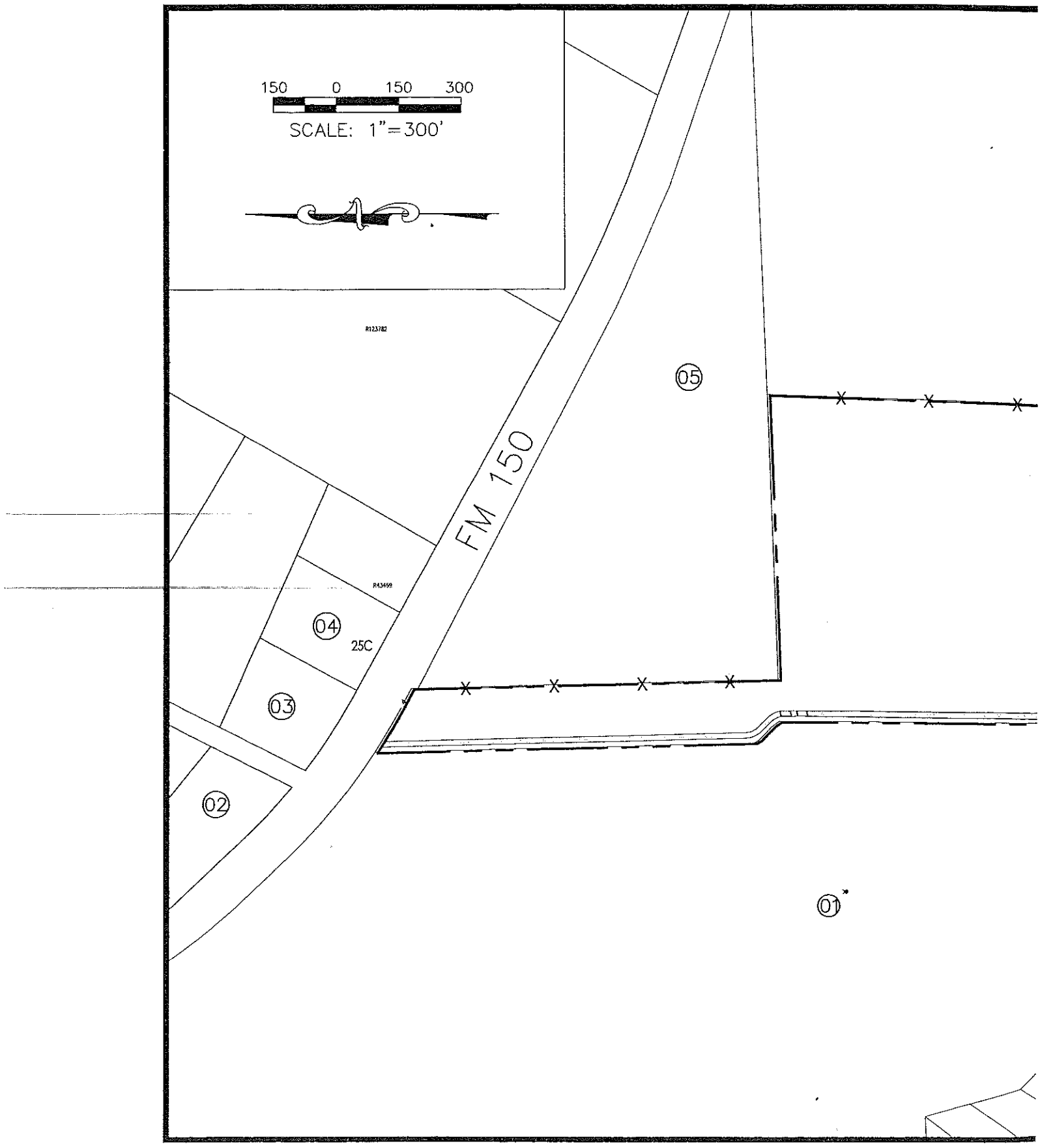
8. b(6) [redacted]

9.

10.

11. Development Solutions CAT LLC
    12222 Merit Dr. Ste 1020
    Dallas, TX 75251

12. b(6) [redacted]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ATTACHMENT 2

HAYS COUNTY
CITY OF DRIPPING SPRINGS
AFFECTED LANDOWNERS MAP - DS WWTP SITE

CMA ENGINEERING, INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
(512) 432-1000 Fax: (512) 432-1015
Registration # F-3053

JOB NO.: 1643-ATT2B

sray - Nov 18, 2015 - 2:32pm - File: M:\DWG\1695-DS TCEQ Permit 2\EXHIBITS\1695-ATT02-LANDOWNERS MAP-WWTP.dwg

HOWARD INTEGRITY LTD
23255 W FM 150
DRIFTWOOD TX 78619

DEVELOPMENT SOLUTIONS CAT LLC
12222 MERIT DR STE 1020
DALLAS TX 75251

b(6) [redacted]

b(6) [redacted]

RPC INVESTMENTS INC
4412 SPICEWOOD SPRINGS RD STE 300
AUSTIN TX 78759

UMARI PARTNERS LP
509A W LYNN ST
AUSTIN TX 78703

b(6) [redacted]

Summary of Treatment Units - See Attachment 7 for Details

Parameter	Units	Interim Phase I	Interim Phase II	Final Phase
Number of Identical Trains	-	1	1	2
Total Capacity (ADMMF)	mgd	0.399	0.4975	0.995
Peak 2-hr Flow	mgd	1.6	1.99	3.98
Secondary Treatment (BNR)				
Total Basin Volume		327,340	327,340	654,680
All Basins in Common:				
Side Water Depth	ft	15.5	15.5	15.5
Inner diameter	ft	62	62	62
Outer diameter	ft	94	94	94
Zone 1 - Anoxic				
Number of Basins	-	1	1	2
Total Arc	deg	41	41	41
Volume	gal	52,320	52,320	104,640
Zone 2 - Aerobic				
Number of Basins	-	1	1	2
Arc	deg	115	115	115
Volume	gal	145,570	145,570	291,140
Zone 3 - Anoxic				
Number of Basins	-	1	1	2
Arc	deg	77	77	77
Volume	gal	97,930	97,930	195,866
Zone 4 - Aerobic				
Number of Basins	-	1	1	2
Arc	deg	23	23	23
Volume	gal	29,510	29,510	59,028
Secondary Clarifiers				
Total Basin Volume	gal	338,740	338,740	677,480
Number of clarifiers	-	1	1	2
Diameter	ft	62	62	62
Side water depth	ft	15.5	15.5	15.5
Tertiary Filters				
Total Filter Area	sf	280	420	560
Number of Filters	-	2	3	4
Hydraulic Loading Rate	gpm/sf	3	1.8	2.7
Filter width	ft	14	14	14
Filter length	ft	10	10	10
Chlorine Contact Basin				
Total Volume	gal	30,000	30,000	60,000
Number of units	-	1	1	2
HRT at 2-hr PDF	min	27	22	22

Table 1.5 Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.					
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Peak 2-hr Flow	mgd		1.6	1.99	3.98
BOD Loading at ADMMF	ppd		800	1,000	2,000
Activated Sludge Process					
Number of Treatment Trains	-	> 0.4 mgd two trains	1		2
Number of Basins per Train	-		1		
Total Volume of all Aeration Basins	gal		327,340		654,680
	1000 cf		43.9		87.8
Organic BOD Loading	ppd BOD /1,000 cf	<50	18.2	22.8	
Hydraulic Detention Time at 2-hr Peak Flow	hr	>1.8	4.9	3.9	
Total Aerated Volume	gal		177,080 (54%)		354,160 (54%)
Total Unaerated Volume	gal		150,250 (46%)		300,500 (46%)
Outer diameter	ft		94		
Inner diameter	ft		62		
Side Water Depth (SWD)	ft	> 10 ft diffuser submergence	15.5		
Number of zones per Basin	-		4		
Zone 1 - Anoxic					
Arc	Degrees		41		
Volume per Train	gal		52,320		
Total Volume	gal		52,320		104,640

Table 1.5 Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.					
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Zone 1 - Anoxic (continued)					
Hydraulic Retention Time at ADMMF	hrs		3.1	2.5	
% of total Aeration Volume	%			16 %	
Type of Mixing	-			Mechanical	
Zone 2 - Aerobic					
Arc	Degrees			115	
Volume per Train	gal			147,570	
Total Volume	gal			147,570	295,140
Hydraulic Retention Time at ADMMF	hrs		8.9	7.1	
% of total Aeration Volume	%			45 %	
Zone 3 - Anoxic					
Arc	Degrees			77	
Volume per Train	gal			97,930	
Total Volume	gal			97,930	195,866
Hydraulic Retention Time at ADMMF	hrs		5.9	4.7	
% of total Aeration Volume	%			30 %	
Type of Mixing	-			Mechanical	
Zone 4 - Aerobic					
Arc	Degrees			23	
Volume per Train	gal			29,510	
Total Volume	gal			29,510	59,028
Hydraulic Retention Time at ADMMF	hrs		1.8	1.4	
% of total Aeration Volume	%			9 %	

Table 1.5 Existing Unit Process Design Criteria City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.					
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Mixed Liquor Recycle					
Flow at ADMMF	mgd		0.8	1.0	2.0
% of ADMMF Influent	%			200%	
External Carbon Addition					
Methanol equivalents	gpd		9.6	12	2436
Operational Design Conditions					
Min. Wastewater Temperature	°C			18	
Minimum aerobic SRT, (aSRT)	days			6	
Mixed Liquor Suspended Solids (MLSS)	mg/L	2,000-5,000	3,010	3,770	

The effluent alkalinity could be low (insufficient influent alkalinity data available to reliably model), suggesting that the implementation of an alkalinity addition system might be required. Carollo recommends the routine monitoring of alkalinity to determine whether alkalinity addition will be required.

Figure 1.12 illustrates the new zone configuration in the Bullseye treatment reactor after the conversion to a 4-Stage Bardenpho treatment process. It may be beneficial to split aerated Zone 2 in half with an additional baffle wall to improve nitrification through enhanced plug flow.

Table 1.6	Conceptual BNR Design Criteria - Secondary Clarification City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	**Units[1]**	**Texas Design Require-ments**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Peak 2-hr Flow	mgd		1.6	1.99	3.98
Secondary Clarifiers					
Number of Units	-	> 0.4 mgd two trains	1		2
Volume	cf		45,286		90,572
	gal		338,740		677,480
Diameter	ft		62		
Surface area	sf		3,019		6,040
Side water depth	ft	>10	15.5		
Weir length	ft		185.4		370
Design Sludge Volume Index (SVI)	mL/g		150		
Clarifier Safety Factor (CSF)	-		2.7		
Weir Loading Rate @ Peak 2-hr Flow	gal/ft	<20,000	5,720	10,730	
Surface Overflow Rate @ Peak 2-hr Flow	gal/sf/day	<1,200	350	660	
Return Activated Sludge Pumps					
Type of Pumps	-		VFD Controlled		
Flow at 150 % of Permitted Influent	mgd		0.6	0.75	1.5
	gpm		420	490	980
Turndown (40% of ADMMF)	mgd		0.16	0.2	0.4
Waste Activated Sludge Pumps					
Type of pumps	-		VFD Controlled		
Number of pumps	-		2		4

10.1.5 Chemical Addition

Chemical addition for phosphorus removal will be added upstream of tertiary filtration with the option to add chemicals also upstream of the secondary clarifiers. Adequate provisions must be included during preliminary and final design to allow for metered dosing and effective mixing, and coagulation to occur upstream of the filters to avoid unnecessary chemical consumption. Design requirements in accordance with Subchapter K of the TAC must be followed. Table 1.7 summarizes the chemical feed design criteria.

Table 1.7 Conceptual BNR Design Criteria - Chemical Alum Feed
City of Dripping Springs Conceptual BNR Design
CMA Engineering, Inc.

Criteria	Units[1]	Texas Design Requirements	Interim I Phase	Interim II Phase	Final Phase
Design Capacity					
ADMMF	mgd		0.399	0.4975	0.995
Chemical Addition					
Type of Chemical	-			Alum	
Dose	gpd		5.5	7.0	14.0
Chemical Strength	mg Al/L			150,000	

10.1.6 Tertiary Filtration

Post-secondary treatment chemical alum addition, flocculation and tertiary filtration will be provided to remove particulate phosphorus (§217.190(a)). As previously explained in section 9.1.2, for planning purposes it was assumed that a conventional down-flow media filter will be used. Preliminary and final design should evaluate whether cloth filters are a suitable cost-effective alternative for effluent polishing. Design criteria for the tertiary filters are summarized in Table 1.8. A minimum of two filter units must be provided for a facility using filtration to provide tertiary treatment for a permit requirement.

The down-flow media filters were sized per TAC by calculating the required filter surface area based on the peak flow through the filters with the largest filter unit out of service using a conservative hydraulic loading rate of 3 gpm per square foot of media surface for a single media filter (Table 1.8). Filtered water will be used for backwash water and will be returned from the filters to the head of the facility for processing. Surface air and/or water will be used for filter scouring.

Table 1.8	Conceptual BNR Design Criteria - Media Filtration City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Design Capacity					
PDF	gpd		611,800	762,840	1,525,600
Tertiary Filters					
Type of Filter	-		Single or Dual Media, down-flow		
Hydraulic Loading Rate	gpm/sf	<3	3.0	1.8	2.7
Number of Units	-	>2	2	3	4
Filter Size, each	sf			140	
Filter Size, total	sf		280	420	560

10.1.7 Disinfection

It is planned to use chlorine for final disinfection. Final disinfection needs to occur downstream of the tertiary P removal filters and therefore, a new chlorine dosing system and chlorine contact tank must be built on-site upstream of the effluent storage tank. The capacity of the chlorination system will need to be upgraded to safely treat the projected design flows for all Permit Phases (Figure 1.9).

Per Chapter 30 TAC 217.281 (b) (1), the Chlorine Contact Basin must be sized to provide a minimum Cl_2 contact time of 20 minutes at the peak flow, meaning the peak 2-hour flow. The dosage requirements are based on the effluent type (Chapter 30 TAC 217.272 (b), Table K.1). For secondary effluent, the dose required is 8 mg/L, for tertiary or nitrified, it is 6 mg/L. Per discharge permit, a 1 mg/L chlorine residual must be maintained after a CT of 20 min.

Table 1.9	Conceptual BNR Design Criteria - Final Disinfection City of Dripping Springs Conceptual BNR Design CMA Engineering, Inc.				
Criteria	**Units[1]**	**Texas Design Requirements**	**Interim I Phase**	**Interim II Phase**	**Final Phase**
Design Capacity					
Peak 2-hr Flow	mgd		1.6	1.99	3.98
Disinfection					
Oxidant	-		Gaseous chlorine		
Dosage	mg/L	>6 mg/L	> 6 mg/L		
Residual	mg/L	>1 mg/L	> 1 mg/L		
Chlorine Contact Basin					
Size	gal		30,000		60,000
HRT @ 2-hr PDF	min	>20	27	22	22

10.1.8 Process Monitoring and Control

BNR treatment for ultra-low nutrient limits requires a robust process monitoring and control support for reliable treatment and cost-effective process operation and chemical applications. During preliminary and detailed design the benefits of online instrumentation need to be further evaluated to reliably control e.g., DO concentrations in the aerated zones, effluent ammonia and nitrate, sludge blanket levels in the SCs, tertiary effluent phosphorous and turbidity. Effective and reliable process operation is also facilitated through automated electronic recording of such relevant data series. Per TAC, at minimum WAS and RAS flows need to be metered and controllable for enhanced BNR operation. The monitoring frequency of influent, effluent, and individual process operations will need to be increased to assure adequate BNR performance and chemical dosing. Specifically, aeration control and solids inventory management will need to be tightly controlled from day-to-day operation so ammonia and nitrate removal is adequately balanced.

10.1.9 Aerobic Digestion, Storage, and Sludge Hauling

Table 1.9 summarizes the WAS flow projections under ADMMF conditions in the Interim I and Interim II Phases at an aSRT of 6 days. The temperature in the sludge holding tanks is close to 18 °C in winter months.

Per 30 TAC 217, the volatile solids (VS) loading rate for aerobic digestion must be designed to be at least 100 lb but not more than 200 lb of VS per 1,000 cf per day. The DO concentration maintained in the liquid must be at least 0.5 mg/L. Energy input for mixing

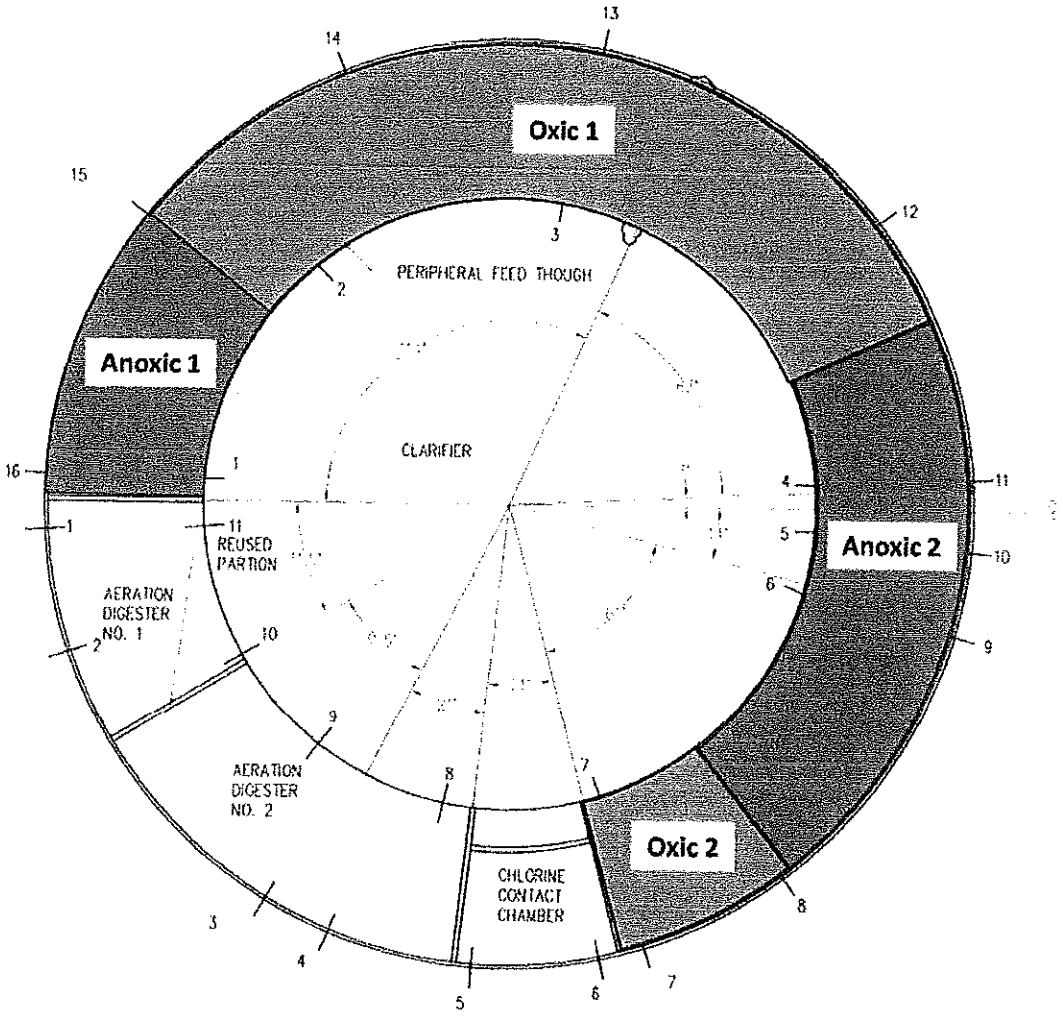
must be at least 20 scfm per 1,000 cf of aeration tank if diffused air mixing is used. The minimum HRT for staged aerobic digestion at 20 degrees is 28 days and for non-staged aerobic digestion 40 days. As the volume in the tanks does not meet the aerobic digester requirements, the tanks are serving as sludge holding tanks (see Table 1.10).

Table 1.10 Conceptual BNR Design Criteria - Sludge Holding Tanks
City of Dripping Springs Conceptual BNR Design
CMA Engineering, Inc.

Criteria	Units	Texas Design Require-ments	Interim I Phase	Interim II Phase	Final Phase
Waste Activated Sludge					
Flow at ADMMF in winter (100%)	gpd		10,000	11,000	22,000
Proportionally Scaled:					
75%	*gpd*		*7,500*	*8,250*	*16,500*
50%	*gpd*		*5,000*	*5,500*	*11,000*
25%	*gpd*		*2,500*	*2,750*	*5,500*
TSS concentration	%			1.0	
VSS Load	ppd		526	655	1,310
Sludge Holding Tanks					
Number of Basins (existing)	-		3		6
Total Volume[1)]	gal		135,150		270,300
	1,000 cf		18.1		36.1
HRT at ADMMF	days	[2)]	13.5	12.3	12.3
VSS Loading Rate	ppd/	100 - 200 lb per 1,000 cf per day	29.1	36.2	

Notes:
1. The total shown here includes the volume currently being used for chlorine contact in the existing treatment train and assumes that new chlorine contact basins will be constructed.
2. The minimum HRT for staged aerobic digestion at 20 degrees is 28 days and for non-staged aerobic digestion 40 days. As the volume does not meet the aerobic digester requirements, the tanks are serving as sludge holding tanks.

As an alternative to meeting minimum criteria for aerobic digestion, the existing permit allows for alternative options for disposal of solids that are not dewatered, and it is assumed that these options will remain available in the future. Under the current hauling procedure



Background image provided by CMA Engineering, Inc.

PROPOSED AERATION BASIN CONFIGURATION (PLAN VIEW)

FIGURE 1.12

CMA ENGINEERING, INC
CITY OF DRIPPING SPRINGS CONCEPTUAL BNR DESIGN

8. Pollutant Analysis of Treated Effluent

(Instructions, Page 57) See Attachment 9

Provide an analysis of the treated effluent for the following pollutants (data must be sampled within 1 year of application submission) in the table below. Effluent data is not required for new permit applications unless the facility is in operation. For ***water treatment facilities*** discharging filter backwash water, use the second table below.

Table 1.0(5) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	3.0	25	186	Grab	Jan 2012 - Sep 2015
Total Suspended Solids, mg/l	3.2	29	186	Grab	Jan 2012 - Sep 2015
Ammonia Nitrogen, mg/l	7.1	46	165	Grab	May 2014 - Sep 2015
Nitrate Nitrogen, mg/l	11.0	55	163	Grab	May 2014 - Sep 2015
Total Kjeldahl Nitrogen, mg/l	8.2	46	164	Grab	May 2014 - Sep 2015
Sulfate, mg/l	24.1		1	Grab	October 8, 2015
Chloride, mg/l	222		1	Grab	October 8, 2015
Total Phosphorus, mg/l	6.94		1	Grab	October 8, 2015
pH, standard units	7.4		1	Grab	October 8, 2015
Dissolved Oxygen, mg/l	8.2		1	Grab	October 8, 2015
Chlorine Residual, mg/l	3.1		1	Grab	October 8, 2015
E.coli (colonies per 100ml) freshwater					
Entercocci (colonies per 100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	964		1	Grab	October 8, 2015
Electrical Conductivity, µmohs/cm	1460		1	Grab	October 8, 2015
Oil & Grease, mg/l	< 5.2		1	Grab	October 8, 2015
Alkalinity ($CaCO_3$), mg/l	79.8		1	Grab	October 8, 2015

Table 1.0(6) - Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, std. units					
Fluoride, mg/l					

Email information for report date:
10/16/15 12:22

Y019491

PGMS

Attn: Louise

b(6) [redacted]

Client Resources

We are continuing to update our on-line client services. Please contact us to set up an account to view results on-line. You may have noticed our website is currently under construction. Stay tuned for additions over the next few months.

Aqua-Tech values your opinion and encourages you to speak with our staff at 979-778-3707 ext. 4 or reporting@aqua-techlabs.com if you have questions.

Thank you for your business,
June M. Brien
Executive Technical Director

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The analyses summarized in this report were performed by Aqua-Tech Laboratories, Inc. unless otherwise noted. Aqua-Tech Laboratories, Inc. holds accreditation from the State of Texas in accordance with TNI and/or through the TCEQ Drinking Water Commercial Laboratory Approval Program.

The following prefixes to each analysis name indicate certification:

NEL	NELAC accredited parameter.
ANR	Accreditation not required by the State of Texas.
DWP	Accreditation through the TCEQ Drinking Water Commercial Laboratory Approval Program.
INF	Aqua-Tech Laboratories, Inc. is not accredited for this parameter. It is reported on an informational basis only.

NELAP Cert. T104704371

TCEQ DW Lab ID TX 239

Any subcontracted data summarized in this report is indicated by "Sub" in the Lab column.

General Definitions:

NR	Not Reported.
RPD	Relative Percent Difference.
% R	Percent Recovery.
dry	Results with the "dry" unit designation are reported on a "dry weight" basis.
SQL	The Sample Quantitation Limit is the value below which the parameter cannot reliably be detected. The SQL includes all sample preparations, dilutions and / or concentrations.
Adj MDL	The Adjusted Method Detection Limit is the MDL value adjusted for any sample dilutions or concentrations .
MDL	The Method Detection Limit is the lowest theoretical value that is statistically different from zero for a specific method, taking into account all preparation steps and instrument settings.

All samples are reported on an "as received" basis unless the designation "dry" is added to the reported unit.

Copies of Aqua-Tech Laboratories, Inc. procedures and individual sampling plans are available upon request. Note that samples are collected by Aqua-Tech Laboratories, Inc. personnel unless otherwise noted in the "Sample Collected" field of this report as "Client" or "CLT".

Samples included in this report were received in acceptable condition according to Aqua-Tech Laboratories, Inc. procedures and 40 CFR, Chapter I, Subchapter D, Part 136.3, TABLE II. - *Required containers, preservation techniques, and holding times,* unless otherwise noted in this report.

This report was approved by:

June M. Brien
Technical Director

The results in this report apply only to the samples analyzed. This analytical report must be reproduced in its entirety unless written permission is granted by Aqua-Tech Laboratories, Inc.

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Analytical Report

PGMS

Report Printed: 10/16/15 12:22

Y019491

Dripping Springs WWTP Effluent

Collected: 10/08/15 14:20 by Harmony Lorentzen
Received: 10/08/15 14:58 by Kelly Kukowski

Type: Grab
Matrix: Non Potable
C-O-C #: N/A

Lab ID# Y019491-01

	Result	Units	Notes	MDL	Adj MDL	SQL	Lab	Analyzed	Method	Batch	
Field Parameters											
Field pH	7.4	Std Units		0.01	0.01	0.1	*Austin*	At Collection	SM4500 H+B, 2000	M062229	NEL
Dissolved Oxygen	8.2	mg/L		0.1	0.1	0.1	*Austin*	At Collection	SM4500 O G, 2001	M062230	NEL
Temperature	28.2	Deg. C		0.1	0.1	0.1	*Austin*	At Collection	SM4500 O G, 2001	M062230	ANR
Total Residual Chlorine	3.1	mg/L			0.1	0.1	*Austin*	At Collection	SM4500 Cl F, 2000	[CALC]	NEL
General Chemistry											
Carbonaceous BOD (5 day)	2	mg/L		1	1	1	*Austin*	10/09/15 07:40 NG	SM5210 B, 2001	M062240	NEL
Total Suspended Solids	6	mg/L		1	1	1	*Bryan*	10/09/15 14:14 SSS	SM2540 D, 1997	M062275	NEL
Total Dissolved Solids	964	mg/L		25.0	50.0	50.0	*Austin*	10/09/15 14:47 KT	SM2540 C, 1997	M062246	NEL
Ammonia as N	<0.05	mg/L		0.03	0.03	0.05	*Bryan*	10/09/15 13:05 SSS	SM4500 NH3 G, 1997	M062252	NEL
Total Kjeldahl Nitrogen as N	0.82	mg/L		0.16	0.16	0.50	*Bryan*	10/15/15 09:43 SSS	EPA 351.2	M062292	NEL
Nitrate as N	62.0	mg/L			0.85	1.30	*Austin*	10/14/15 13:00 MSA	SM4500 NO3-F 2000	[CALC]	NEL
Nitrite as N	<0.05	mg/L		0.001	0.05	0.05	*Austin*	10/09/15 12:28 MSA	SM4500 NO2- B, 2000	M062268	NEL
Nitrate/Nitrite as N	62.0	mg/L		0.03	0.85	1.25	*Bryan*	10/14/15 13:00 SSS	SM4500 NO3-F 2000	M062369	NEL
Total Alkalinity as CaCO3 (pH4.5)	79.8	mg/L		4.00	4.00	4.00	*Bryan*	10/13/15 09:47 CLL	SM2320 B, 1997	M062327	NEL
Oil & Grease (HEM)	<5.2	mg/L		1.4	1.4	5.2	*Bryan*	10/12/15 10:45 BWS	EPA 1664B	M062295	NEL
Chloride	222	mg/L		1.59	4.55	14.3	*Bryan*	10/12/15 14:52 SSS	SM4500 Cl- B, 1997	M062299	NEL
Sulfate	24.1	mg/L		1.08	1.08	5.00	*Bryan*	10/09/15 09:38 CLL	ASTM D516 07	M062260	NEL
Specific Conductance @ 25.0 °C	1460	uS/cm		2.00	2.00	2.00	*Bryan*	10/12/15 10:19 HNS	SM2510 B, 1997	M062294	NEL
Metals (Total)											
Phosphorus-Total	6.94	mg/L	B	0.005	0.003	0.005	*Bryan*	10/11/15 18:55 JRB	EPA 200.7 R4.4	M062259	NEL

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NOV 3 0 2015
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Explanation of Notes

B	Analyte is found in the associated blank as well as in the sample.
BOD-01	Dilution water blanks fell outside of acceptance criteria of 0.2 mg/L.
ICP-01	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
J	Analyte detected below the SQL but above the MDL.
LCS-01	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
MS-01	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS and/or LCSD recovery.
RPD-01	Duplicate RPD is outside acceptable range. Acceptance of run is not based on matrix QC.

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Analytical Report

PGMS

Report Printed: **10/16/15** **12:22**

Y019491

Field Parameters - Quality Control

	Result	Units	Notes	SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch
Dissolved Oxygen - SM4500 O G, 2001												*Austin*
Reference	0.2	mg/L		0.1	10/08/15 14:12 HL	100		0.220	0 - 1			M062230
Duplicate	8.2	mg/L		0.1	10/08/15 14:20 HL		8.2			0.122	1.8	M062230
Field pH - SM4500 H+B, 2000												*Austin*
LCS	6.9	Std Units		0.1	10/08/15 14:10 HL	6.86		101	96.3 - 104			M062229
LCS	9.2	Std Units		0.1	10/08/15 14:10 HL	9.18		101	96.3 - 104			M062229
Duplicate	7.4	Std Units		0.1	10/08/15 14:20 HL		7.4			0.00	0.644	M062229
LCS	6.9	Std Units		0.1	10/08/15 14:30 HL	6.86		101	96.3 - 104			M062229
LCS	9.2	Std Units		0.1	10/08/15 14:30 HL	9.18		100	96.3 - 104			M062229
Temperature - SM4500 O G, 2001												*Austin*
Duplicate	28.1	Deg. C		0.1	10/08/15 14:20 HL		28.2			0.355	2.47	M062230
Duplicate	27.4	Deg. C		0.1	10/08/15 14:20 HL		27.4			0.00	10.1	M062229

General Chemistry - Quality Control

	Result	Units	Notes	SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch
Ammonia as N - SM4500 NH3 G, 1997												*Bryan*
Blank	<0.05	mg/L		0.05	10/09/15 13:05 SSS							M062252
LCS	0.56	mg/L		0.05	10/09/15 13:05 SSS	0.500		112	81.4 - 123			M062252
LCS Dup	0.56	mg/L		0.05	10/09/15 13:05 SSS	0.500		112	81.4 - 123	0.184	5.73	M062252
Matrix Spike	0.89	mg/L		0.05	10/09/15 13:05 SSS	0.500	0.37	105	77.2 - 127			M062252
Matrix Spike Dup	0.90	mg/L		0.05	10/09/15 13:05 SSS	0.500	0.37	106	77.2 - 127	1.03	11.2	M062252
Initial Cal Check	3.65	mg/L		0.05	10/09/15 13:05 SSS	3.36		109	85 - 115			1510055
Carbonaceous BOD (5 day) - SM5210 B, 2001												*Austin*
Seed Blank	<1	mg/L	*BOD-01*	1	10/09/15 07:40 NG							M062240
Duplicate	332	mg/L		78	10/09/15 07:40 NG		312			6.21	38.7	M062240
GG Acid 198	174	mg/L		1	10/09/15 07:40 NG	198		87.7	84.6 - 115			M062240
GG Acid 198	179	mg/L		1	10/09/15 07:40 NG	198		90.2	84.6 - 115			M062240

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General Chemistry - Quality Control

	Result	Units	Notes	SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch
Chloride - SM4500 Cl- B, 1997												*Bryan*
Blank	<5.00	mg/L		5.00	10/12/15 14:52 SSS							M062299
LCS	25.5	mg/L		5.00	10/12/15 14:52 SSS	24.8		103	90 - 110			M062299
Matrix Spike	1780	mg/L		100	10/12/15 14:52 SSS	495	1290	99.0	92 - 106			M062299
Initial Cal Check	25.0	mg/L		5.00	10/12/15 14:52 SSS	25.0		100	85 - 115			1510067
Nitrate/Nitrite as N - SM4500 NO3-F 2000												*Bryan*
Blank	<0.05	mg/L		0.05	10/14/15 13:00 SSS							M062369
LCS	2.05	mg/L		0.05	10/14/15 13:00 SSS	2.00		102	92.9 - 108			M062369
LCS Dup	2.05	mg/L		0.05	10/14/15 13:00 SSS	2.00		102	92.9 - 108	0.113	2.4	M062369
Matrix Spike	3.41	mg/L		0.05	10/14/15 13:00 SSS	2.00	1.38	102	84.9 - 115			M062369
Matrix Spike Dup	3.44	mg/L		0.05	10/14/15 13:00 SSS	2.00	1.38	103	84.9 - 115	1.52	2.44	M062369
Initial Cal Check	0.53	mg/L		0.05	10/14/15 13:00 SSS	0.488		109	85 - 115			1510089
Nitrite as N - SM4500 NO2- B, 2000												*Austin*
Blank	<0.05	mg/L		0.05	10/09/15 12:28 MSA							M062268
LCS	0.06	mg/L		0.05	10/09/15 12:28 MSA	0.0600		103	90 - 110			M062268
Matrix Spike	0.12	mg/L		0.05	10/09/15 12:28 MSA	0.0600	0.06	96.1	70.9 - 117			M062268
Matrix Spike Dup	0.12	mg/L		0.05	10/09/15 12:28 MSA	0.0600	0.06	98.4	70.9 - 117	2.38	13.5	M062268
Initial Cal Check	0.07	mg/L		0.05	10/09/15 12:28 MSA	0.0686		104	85 - 115			1510059
Oil & Grease (HEM) - EPA 1664B												*Bryan*
Blank	<5.4	mg/L		5.4	10/12/15 10:45 BWS							M062295
LCS	39.4	mg/L		5.3	10/12/15 10:45 BWS	42.3		93.2	78 - 114			M062295
Matrix Spike	36.2	mg/L		5.1	10/12/15 10:45 BWS	41.0	<5.1	88.3	78 - 114			M062295
Reference	40.6	mg/L		5.3	10/12/15 10:45 BWS	42.8		94.8	83 - 101			M062295
Specific Conductance @ 25.0 °C - SM2510 B, 1997												*Bryan*
Blank	<2.00	uS/cm		2.00	10/12/15 10:19 HNS							M062294
Duplicate	1500	uS/cm		2.00	10/12/15 10:19 HNS		1460			2.23	3.29	M062294
LCS	1440	uS/cm		2.00	10/12/15 10:19 HNS	1410		102	96.6 - 102			M062294
Initial Cal Check	458	uS/cm		2.00	10/12/15 10:30 HNS	402		114	85 - 115			1510066

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General Chemistry - Quality Control

	Result	Units	Notes	SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch	
Sulfate - ASTM D516 07													*Bryan*
Initial Cal Check	9.80	mg/L		5.00	10/09/15 08:55 CLL	10.0		98.0	80 - 120			1510013	
Blank	<5.00	mg/L		5.00	10/09/15 09:38 CLL							M062260	
Blank	<5.00	mg/L		5.00	10/09/15 09:38 CLL							M062260	
Duplicate	193	mg/L		50.0	10/09/15 09:38 CLL		182			6.00	9.63	M062260	
LCS	9.54	mg/L		5.00	10/09/15 09:38 CLL	10.0		95.4	80 - 120			M062260	
Matrix Spike	290	mg/L		50.0	10/09/15 09:38 CLL	100	182	108	57.7 - 126			M062260	
Initial Cal Check	9.62	mg/L		5.00	10/09/15 09:38 CLL	10.0		96.2	80 - 120			1510056	
Total Alkalinity as CaCO3 (pH4.5) - SM2320 B, 1997													*Bryan*
Duplicate	234	mg/L		4.00	10/13/15 09:47 CLL		224			4.37	9.37	M062327	
LCS	74.1	mg/L		4.00	10/13/15 09:47 CLL	80.0		92.6	90.8 - 111			M062327	
Initial Cal Check	9.09	mg/L		4.00	10/13/15 09:47 CLL	9.18		99.0	97 - 103			1510073	
Initial Cal Check	6.95	mg/L		4.00	10/13/15 09:47 CLL	6.86		101	97 - 103			1510073	
Total Dissolved Solids - SM2540 C, 1997													*Austin*
Blank	<25.0	mg/L		25.0	10/09/15 14:47 KT							M062246	
Duplicate	886	mg/L		50.0	10/09/15 14:47 KT		884			0.226	10.4	M062246	
Reference	45.0	mg/L		25.0	10/09/15 14:47 KT	50.3		89.5	66.8 - 140			M062246	
Total Kjeldahl Nitrogen as N - EPA 351.2													*Bryan*
Blank	<0.50	mg/L		0.50	10/15/15 09:43 SSS							M062292	
LCS	4.18	mg/L		0.50	10/15/15 09:43 SSS	4.00		105	85.7 - 118			M062292	
LCS Dup	4.66	mg/L	*LCS-01*	0.50	10/15/15 09:43 SSS	4.00		116	85.7 - 118	*10.7*	8.72	M062292	
Matrix Spike	222	mg/L	*MS-01*	15.0	10/15/15 09:43 SSS	40.0	163	*148*	87.3 - 127			M062292	
Matrix Spike Dup	284	mg/L	*MS-01, RPD-01*	15.0	10/15/15 09:43 SSS	40.0	163	*304*	87.3 - 127	*69.4*	15.6	M062292	
Reference	7.94	mg/L		0.50	10/15/15 09:43 SSS	6.96		114	85 - 115			M062292	
Total Suspended Solids - SM2540 D, 1997													*Bryan*
Blank	<1	mg/L		1	10/09/15 14:14 SSS							M062275	
Blank	<1	mg/L		1	10/09/15 14:14 SSS							M062275	
Duplicate	5920	mg/L		400	10/09/15 14:14 SSS		5640			4.84	12.3	M062275	
Duplicate	5840	mg/L		400	10/09/15 14:14 SSS		6210			6.14	12.3	M062275	
Reference	105	mg/L		10	10/09/15 14:14 SSS	101		104	86 - 108			M062275	

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Metals (Total) - Quality Control

	Result	Units	Notes	SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch
Phosphorus-Total - EPA 200.7 R4.4												*Bryan*
Blank	0.005	mg/L	*ICP-01*	0.005	10/11/15 18:24 JRB							M062259
LCS	2.37	mg/L	*B*	0.005	10/11/15 18:28 JRB	2.50		95.0	84.5 - 115.4			M062259
LCS Dup	2.23	mg/L	*B*	0.005	10/11/15 18:31 JRB	2.50		89.4	84.5 - 115.4	6.10	20	M062259
Duplicate	0.372	mg/L	*B*	0.005	10/11/15 18:41 JRB		0.364			2.43	20	M062259
Matrix Spike	3.09	mg/L	*B*	0.005	10/11/15 18:48 JRB	2.50	0.364	109	69.5 - 130.4			M062259

Sample Preparation Summary

Sample	Method	Prepared	Lab	Bottle	Initial	Units	Final	Units	External Dilution Factor	Batch
Y019491-01										
Ammonia as N	SM4500 NH3 G, 1997	10/9/15 13:05 SSS	Bryan	A	10.0	mL	10.0	mL	1	M062252
Carbonaceous BOD (5 day)	SM5210 B, 2001	10/9/15 7:40 NG	Austin	B	300	mL	300	mL	1	M062240
Chloride	SM4500 Cl- B, 1997	10/12/15 14:52 SSS	Bryan	K	35.0	mL	100	mL	1	M062299
Nitrate/Nitrite as N	SM4500 NO3-F 2000	10/14/15 13:00 SSS	Bryan	A	1.00	mL	25.0	mL	1	M062369
Nitrite as N	SM4500 NO2- B, 2000	10/9/15 12:28 MSA	Austin	E	25.0	mL	25.0	mL	1	M062268
Oil & Grease (HEM)	EPA 1664B	10/12/15 10:45 BWS	Bryan	F	969	mL	1000	mL	1	M062295
Phosphorus-Total	EPA 200.7 R4.4	10/9/15 9:39 HNS	Bryan	C	50.0	mL	25.0	mL	1	M062259
Specific Conductance @ 25.0 °C	SM2510 B, 1997	10/12/15 10:19 HNS	Bryan	K	25.0	mL	25.0	mL	1	M062294
Sulfate	ASTM D516 07	10/9/15 9:38 CLL	Bryan	K	100	mL	100	mL	1	M062260
Total Alkalinity as CaCO3 (pH4.5)	SM2320 B, 1997	10/13/15 9:47 CLL	Bryan	K	50.0	mL	50.0	mL	1	M062327
Total Dissolved Solids	SM2540 C, 1997	10/9/15 14:47 KT	Austin	I	50.0	mL	100	mL	1	M062246
Total Kjeldahl Nitrogen as N	EPA 351.2	10/12/15 10:05 SSS	Bryan	A	25.0	mL	25.0	mL	1	M062292
Total Suspended Solids	SM2540 D, 1997	10/9/15 14:14 SSS	Bryan	J	1000	mL	1000	mL	1	M062275

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Pr 91 7199 9991 7033 2869 0778

October 29, 2015

CERTIFIED MAIL

Ms. Ginger Faught, Deputy City Administrator
City of Dripping Springs
P.O. Box 384
Dripping Springs, Texas 78620

Re: Application to Proposed Wastewater Permit No. WQ0014488003 (RN104005434)
City of Dripping Springs South Regional Wastewater Facilities (CN602491284)

Dear Ms. Faught:

We have received the above referenced application and it is currently under review. Your attention to the following items is requested before we can declare the application administratively complete. Please submit one original and two copies (including a cover letter) of the complete response.

1. Item 2. on page 6 of the Administrative Report: Thank you for providing the billing address. However, due to an omission in the application, the applicant's name is not requested. For that reason, the billing contact name is still required. Please resubmit the corrected page with the billing contact's name.

2. Item 6. e. 5. on page 11 of the Administrative Report: You indicated that there is a bilingual program at the nearest elementary or middle school, however, you did not provide the language spoken. Please resubmit the corrected page with the language spoken.

3. Item 7. Section A. on page 12 of the Administrative Report: We were unable to verify the street address of 23127 Ranch Road 150, Dripping Springs, Texas 78620 with the US Postal Service. Please confirm that the address provided is a valid address and resubmit the corrected page or indicate if this is a 911 address in your cover letter.

4. Signature page on page 14 of the Administrative Report: Thank you for submitting the signature page, however, the page was not correctly notarized. The notary wrote their name in the space after the statement "Subscribed and Sworn to before me by the said..." Please resubmit the corrected signature page with Mr. Todd Purcell's name in the appropriate space. Please ensure that the signature page bears the notarized, original, wet ink signature of Mr. Purcell.

5. Item 1. a. on page 21 of the Administrative Report 1.1: Thank you for submitting the landowner's map, however, there is additional information required. Tracts 5-7 all merge together. These tracts must have their boundaries clearly defined. Please see the attached map and clarify the boundaries or the following tracts highlighted in yellow and resubmit the landowner's map.

6. Item 1. b. on page 22 of the Administrative Report Worksheet 1.1:
You submitted the cross-referenced list of affected landowners; however you did not submit the names and addresses in the Avery 5160 label format. Please submit another CD with the landowner mailing labels listed in the Avery 5160 label format (3 columns across, 10 columns down, for a total of 30 labels per page). Additionally, the names and addresses must follow the format required by the Commission. Each letter in the name and address must be capitalized, contain no punctuation, and the appropriate two-character abbreviation must be used for the state as shown below:

   NAME
   ADDRESS
   CITY ST ZIP

7. Item 3. b. on page 2 of the Technical Report: You indicated that there was an attachment that listed the treatment unit types, the number of units and the dimensions in (Length x Width x Diameter). However, the required information is not listed. Please complete the table with the treatment unit types, number of units and dimensions.

8. Item 8 on page 11 of the Technical Report: The pollutant analysis table is not complete. Please provide a completed pollutant analysis.

9. The following is a portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit. Please read it carefully and indicate if it contains any errors or omissions

City of Dripping Springs, P.O. Box 384, Dripping Springs, Texas 78620, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0014488003 (EPA I.D. No. TX0136778) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 995,000 gallons per day. The domestic wastewater treatment facility is located at *a location to be determined.* The discharge route is from the plant site to via pipe to Walnut Springs; thence to Onion Creek. TCEQ received this application on October 20, 2015. The permit application is available for viewing and copying at Dripping Springs City Hall, Front Desk, 511 Mercer Street, Dripping Springs, Texas. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application.
http://www.tceq.texas.gov/assets/public/hb610/index.html?lat=30.154166&lng=-98.08&zoom=13&type=r

Further information may also be obtained from the City of Dripping Springs at the address stated above or by calling Mr. Robert Callegari, P.E., CMA Engineering, Inc. at 512-432-1000.

Please submit the complete response, addressed to my attention by November 28, 2015. If the requested information is not received by the given deadline, pursuant to 30 TAC Chapter 281, the application will be removed from our list of pending applications. Please contact me at (512) 239-4418 or Lisa.Iroanya@tceq.texas.gov if you have any questions.

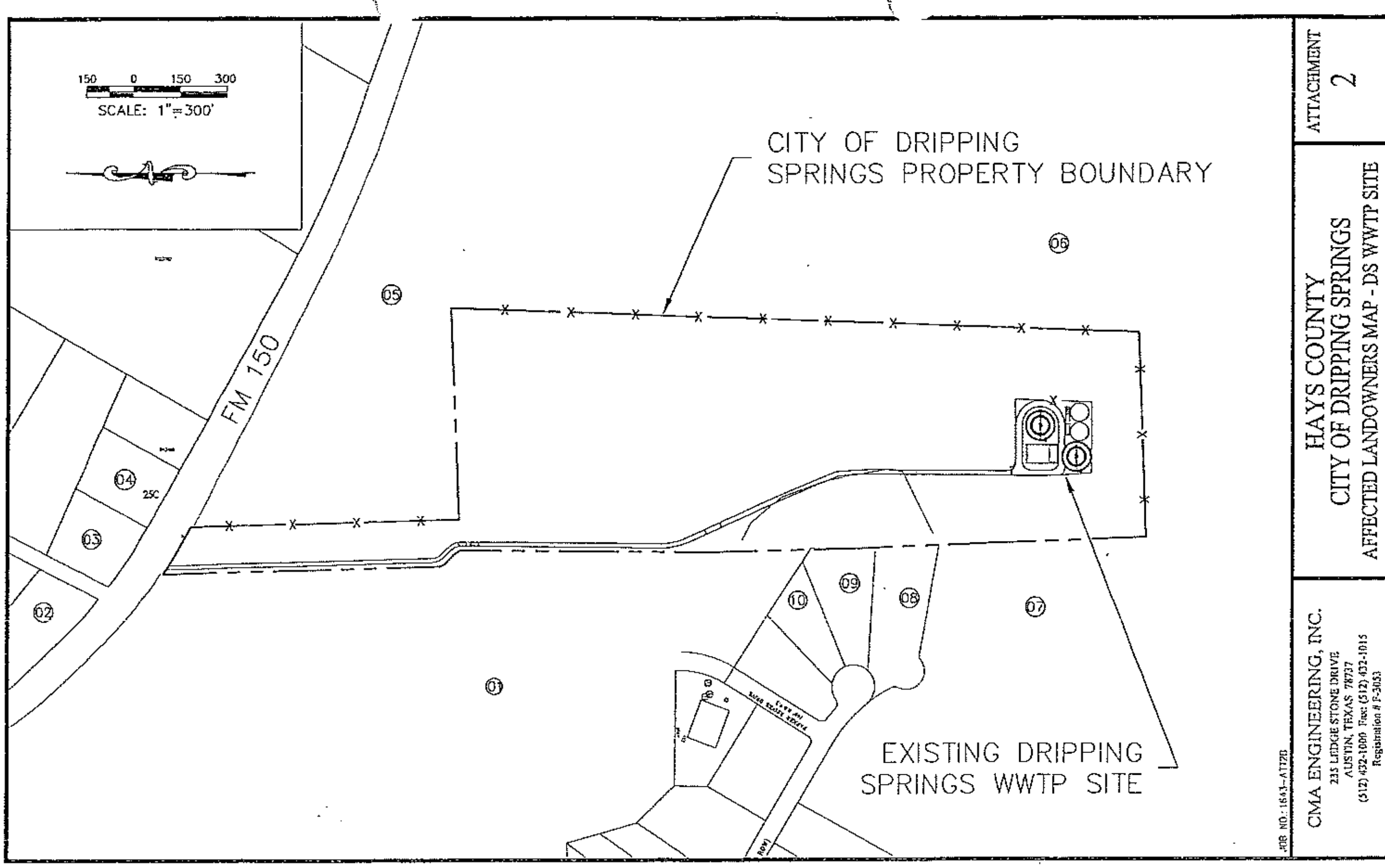
Sincerely,

Lisa Iroanya
Water Quality Division (MC 148)
Texas Commission on Environmental Quality

Enclosure

cc: Mr. Robert Callegari, P.E., Principal, CMA Engineering, Inc., 235 Ledge Stone Drive, Austin, Texas 78737

bcc: TCEQ Region 11, Water Program Manager w/enclosure


150 0 150 300
SCALE: 1"=300'
CITY OF DRIPPING SPRINGS PROPERTY BOUNDARY
FM 150
01
02
03
04
05
06
07
08
09
10
EXISTING DRIPPING SPRINGS WWTP SITE
ATTACHMENT 2
HAYS COUNTY
CITY OF DRIPPING SPRINGS
AFFECTED LANDOWNERS MAP - DS WWTP SITE
CMA ENGINEERING, INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
(512) 432-1000 Fax: (512) 432-1015
Registration # F-3053
JOB NO.: 1643-ATT2B

CHECK LIST FOR ADMIN REVIEW OF INDUSTRIAL/MUNICIPAL APPLICATIONS FOR PERMIT		
Permit No. WQ00[14468003	TX 0136778	MGD .995
CN 602491284	RN 104905434	County: Hays Region No. 11
Facility: ( ) Major (X) Minor	App Rcvd Date: 10/20/15	Permit Expiration Date : ——
( ) Inactive (X) Active	Segment No. 1427	

Note: A minor facility is generally one in which the final flow is less than 1.0 MGD. Check TRACS to be sure.

Application Review Date: _____

[ ] A copy of the pretech **review** was provided by the Municipal Permits Team (for new, major amendments and major facilities) – Muni apps only

[X] For **new and major amendment applications that propose surface water discharge**, the standards review for RWA comments is included

[X] Coastal Zone sheet is included.

Fees or Penalties Owed: [X] No [ ] Yes Amt Owed: _____

Application Fees: The appropriate item checked **and** payment verified in receipt rpt or boexi rpt.

Industrial Application Fees

EPA Classification	New	Major Amend.	Renewal
Minor, **not** subject to categ stds	[ ] $350	[ ] $350	[ ] $315
Minor, subject to categ stds	[ ] $1,250	[ ] $1,250	[ ] $1,215
Major facility	N/A *	[ ] $2,050	[ ] $2,015

** All new industrial facilities are designated as minor.*

Municipal Fees

Proposed/Final Phase Flow	New/Major Amend.	Renewals
< .05 MGD	[ ] $350.00	[ ] $315.00
≥ .05 but < .10 MGD	[ ] $550.00	[ ] $515.00
≥ .10 but < .25 MGD	[ ] $850.00	[ ] $815.00
≥ .25 but < .50 MGD	[ ] $1,250.00	[ ] $1,215.00
≥ .50 but < 1.0 MGD	[X] $1,650.00	[ ] $1,615.00
≥ 1.0 MGD	[ ] $2,050.00	[ ] $2,015.00

[X] The Type of application is marked

[ ] Reason for major amendment, if applicable. Also, check Item 5 on page 3 (Unbuilt Phases) of the technical report.

APPLICANT INFORMATION – Must be the treatment facility owner

[X] Legal name of entity is listed.

[X] Verify correct mailing address on the USPS or FEDEX website

[ ] **Corporation:** Check with Secretary of State (SOS) at: https://direct.sos.state.tx.us/acct/acct-login.asp verify the entity status and charter number – print page. Verify correct legal spelling of applicant's name. Check spelling with SOS against the name listed in the application. (Permit must be issued in name as filed with SOS.) The applicant must be "**In existence and active**" before the application can be processed further.

[ ] **Those entities subject to state franchise taxes:** If applicable, check with Comptroller (website at: http://ecpa.cpa.state.tx.us/coa/coaStart.html. Verify thetax identification number is correct. Note: Non-profit organizations and partnerships are not subject to the state franchise tax.

[ ] **Individual:** The complete legal name, including the middle name; Date of birth; and TX Driver's license or

other ID. This info is required by Chapter 26.027C of the Texas Water Code.

[ ] **Utility District:** Check IWUD to verify that district is not dissolved (inactive is O.K. to process)

[ ] **Trust**: A copy of an executed trust agreement is provided. Verify that applicant's name is the same as the name in the trust agreement. NOTE: Executed trust must show signatures of trustees or beneficiaries forming the trust and which county it is recorded in.

[ ] **Partnership**: Verify with Secretary of State (SOS) that partnership is registered, active, and has a filing number. Check spelling with SOS against the name submitted in Item 1; Check that SOS # is correct; Print page from SOS website. OR if the partnership is not listed with the SOS, a copy of the partnership agreement is provided by the applicant. The agreement must: give the name of the partnership as provided on the application for permit; list names of partners; bear signatures of the partners; state the terms of the partnership; and must be recorded in the county where the facility (plant) is located.

[X] **Municipality/Governmental Agencies/School Districts:** City, County, ISD, Fed, etc. – applicable info is listed

[ ] Other _____

CO-PERMITTEE INFORMATION

[ ] Verify **co-permittee/ operator** information (name, address, etc) **if required** to apply as co-permittee with facility owner. Verify same information as applicant information above.

CONTACT INFORMATION

[ ] Billing Contact name and address information is provided Billing contact name
[X] Application Contact name and address information is provided
[X] DMR Contact name and address information is provided
[ ] Permit Contact name and address information is provided

NOTICE INFORMATION

[X] Name and phone number of one person responsible for publishing NORI is provided.
[X] Method of sending NORI package is provided.
[ ] Name and phone number of contact to be in NORI is provided.
[X] Location where application will be available is provided and is in the county where the facility is located - the location must be a building supported by taxpayer funds. Note: If discharge is directly into water body that borders two counties, application must be placed in a public facility in both counties and the notice must be published in both counties.
[ ] Bilingual Items 1 – 5 are completed. If "Yes" to question 1 and "Yes" to either questions 2, 3 or 4, then e.5 must be completed. Language?

REGULATED ENTITY INFORMATION

[X] Edwards Aquifer Item is checked.
[ ] The street address or location description of the facility is adequately described. If different from current permit, a new permit may be required. Use USPS website or GIS mapping to confirm street address.
[X] The name of the nearest city has been provided.
[X] zip code is provided.
[X] The county where the facility is located is provided
[X] The longitude and latitude of the facility is provided – check mapit
[ ] Owner of the facility identified in the application is the same as the name given in Item 1. ***(For new permits only***: A copy of an executed option to purchase agreement may be provided to show that applicant will have ownership upon permit approval.) **(NOTE:** THE **OWNER OF THE FACILITY IS**

REQUIRED TO APPLY FOR THE PERMIT. (Refer to legal policy memo for complete definition and discussion of facility.)

[X] For domestic facilities, marks whether ownership of the facility is public, private or both

[X] Owner of the land where permitted facility is located is the **SAME** as the applicant. ***(For new permits only***: A copy of an executed option to purchase agreement may be provided to show that applicant will have ownership upon permit approval)

[ ] The owner of the land on which the facility is located is **DIFFERENT FROM** the owner of the facility: A copy of a lease agreement or easement, with a term for the duration of the permit, between applicant and landowner, has been provided. See Lease Agreement/Easement Memo dated 2/14/06, that states that a lease is sufficient for pond systems, and that details the provisions that a lease agreement or easement must contain. OR, landowner can apply as a co-permittee. Lease must identify property by legal description or map.

Effluent Disposal Site Owner:

[X] N/A - (no effluent disposal proposed)

[ ] If land disposal is authorized in permit or proposed, the applicant **OWNS** land on which site is located.

[ ] If applicant **DOES NOT OWN** land where site is located, a long-term lease agreement is provided which includes: a term of at least 5 years; is current or it includes an option to renew the term; is between the current applicant and the landowner; and includes description of property by legal description or map.

Sewage Site Owner:

[X] N/A - (no sludge disposal proposed)

[ ] If sludge is authorized in permit or proposed, the applicant **OWNS** land on which irrigation site is located, otherwise lease is needed unless Class B sludge is land applied. Check the permit under Sludge Provisions to determine if sludge is authorized. Note: For BLU sludge application – lease is not needed; Landowner just needs to sign sludge affidavit (if different from applicant).

DISCHARGE/DISPOSAL INFORMATION

[ ] Identified whether or not facility or discharge are on Indian land (If yes, we do not have permit authority.)

[X] An ORIGINAL or equivalent FULL-SIZED USGS 7.5 minute topographic map is provided and labeled showing: [ ] boundaries of the facility [ ] point of discharge [ ] highlighted discharge route for three miles downstream or until it reaches a classified segment [ ] irrigation site(s) [ ] pond(s) [ ] sludge disposal/land application site [ ] an area of not less than one mile in all directions of the site.

All maps must show:

[X] Color map [X] Clear contour lines [X] Upper left corner must identify map as USGS Department of the Interior Geological Survey [X] Lower left corner, datum & project information [X] Bottom, magnetic declination [X] Bottom, must show scale [X] Bottom, identify contour intervals [X] Bottom, national map accuracy std statement [X] Bottom, show State of TX and quad location [X] Around map, lat and long coordinates [X] Bottom, quadrangle name [X] Bottom, must identify map date

[ ] For permits that allow sewage disposal the location description is adequately described. For an already-existing permit, check to see that the location has not changed.

Discharge Information:

[X] Checked if discharge info in permit is correct. If applicable, the discharge route description is adequately described and describes the discharge route to the nearest major watercourse. Changing the point of discharge and route from the current permit description requires a major amendment.

[X] The name of the city (or nearest city) where the outfall(s) is/will be located has been provided.

[X] The county where the outfall is located is provided

[X] The longitude and latitude of the outfall is provided.

[ ] marked item regarding authorization for discharge into a city, county, state or fcd ditch. If applicable, correspondence is provided. Email TXDOT if discharge is to a state highway right-of-way or roadside ditch.

[ ] For a daily average flow of 5 MGD or more: the names of all counties located within 100 miles downstream from the point of discharge

Disposal Information:

[ ] The written location description of the disposal site is adequately described. **(NOTE: A CHANGE IN LOCATION OR INCREASE IN ACREAGE REQUIRES A MAJOR AMENDMENT. A decrease in acreage may also be a major amendment (due to flow rate) - check with permit writer)**

[ ] The name of the city (or nearest city) has been provided.

[ ] The county where the disposal site is located is provided

[ ] The longitude and latitude of the disposal site is provided.

[ ] The written flow of effluent from the facility to the effluent disposal site is adequately described.

[ ] The nearest watercourse to the disposal site is listed.

All applications:

[X] Must indicate whether any former TCEQ employees who were paid for services regarding this application.

[X] Fees or Penalties Owed: [X] No [ ] Yes - See page 1 of checklist

SIGNATURE PAGE

Note: The signature information below lists the proper signatories for the various entities; however, the current version of the application contains a paragraph referencing 30 TAC 305.44. The person signing the application verifies that he or she is authorized, under this rule, to sign the application. We must verify that the title meets the requirements or signatory authority has been delegated and proof has been provided.

[ ] Original Signature Page is required.

[ ] Signature must be properly notarized – check that signature date and notarized date are the same.

Owner	Co-Permittee	Operator	
[ ]	[ ]		City - Elected official or principle executive officer of the city.
[ ]	[ ]		Individual: only the individual signs for himself/herself.
[ ]	[ ]		Partnership: General Partner or exec officer
[ ]	[ ]		Corporation: at least the level of vice president (CEO, Chairman of Board, Secretary can be equiv to V.P.)
[ ]	[ ]		Utility District: at least the level of vice president, on Board of Directors or District Manager
[ ]	[ ]		Water Authority: Regional managers.
[ ]	[ ]		Independent School Districts: at least level of the Assistant Superintendent or board members.
[ ]	[ ]		Governmental Agencies: Division Directors or Regional Directors.
[ ]	[ ]		Trust: The trustee that has been identified in the trust agreement.
[ ]	[ ]		Other: _____

SUPPLEMENTAL PERMIT INFORMATION FORM

[X] SPIF is provided and complete.

IF CORE DATA FORM IS INCLUDED:

Core Data Form - Only required for existing permittees if there is a change to the core data, i.e.: ownership change, name or address change

[ ] Verify that the customer role is accurate

[ ] Verify the type of customer has been provided and that it matches TRACS

[ ] Name should match the application and SOS - item 8

[ ] Verify mailing address matches the application and is validated @ USPS.com

[ ] Ensure Regulated Entity matches TRACS and the application

ADMIN RPT 1.1 - FOR NEW AND MAJOR AMENDMENT APPLICATIONS

For All New or Major Amendment Applications

Landowners adjacent to the applicant's property include:

[X] The applicant's complete property boundaries are delineated which includes boundaries of property owned by the applicant

[ ] For domestic facilities, show the buffer zone and identify all of the landowners whose property is located within the buffer zone

[ ] The property boundaries of the landowners surrounding the applicant's property have been clearly delineated on the map

5,617?
11,127

[X] The location of the facility within applicant's property is shown.

For TPDES applications:

[ ] The point(s) of discharge is clearly identified on the map and the discharge route(s) is highlighted.

[X] The scale of map is provided to measure one mile downstream **or** if discharge is into a lake or stream affected by tidal, ½ mile up & down stream is measured.

[ ] The property boundaries of landowners adjacent to the discharge route(s) for one mile downstream from the point of discharge have been clearly delineated and the route is clearly delineated. **OR** If discharge is into a lake or stream affected by tidal, the property boundaries of landowners ½ mile up & downstream and those property owners across the lake along the shore line that fall within a ½ mile radius of the point of discharge are clearly delineated on the map.

For applications proposing an irrigation site or additional acreage for irrigation:

[ ] The boundaries of the irrigation site within the applicant's property are clearly identified on the map.

[ ] The boundaries of landowners surrounding the property boundaries where the irrigation site located.

If the applicant owns a large tract of land where the irrigation is proposed:

[ ] the irrigation site boundaries are shown [ ] One mile radius from the site is shown

[ ] the scale is provided [ ] landowners immediately adjacent to the applicant's boundaries that fall within the 1 mile radius are indicated

For All New and Major Amendment:

[ ] Disk or four sets of labels were provided.

[X] Cross-referenced list of landowners is provided

[X] Source of landowners' info was provided.

[X] Provided response regarding permanent school fund land. If information filled out on General Land Office, then indicate so on the contact sheet.

The Following Is For Municipal New & Major Amendment Applications

[X] Buffer zone map (8 ½ by 11) which includes:

[X] The applicant's property boundaries, each treatment unit, and clearly identifies the distance from each unit to the property line, showing the required buffer zone (Chapter 309) to be by ownership.

[X] Marked if the required buffer zone is by ownership

[ ] The required buffer zone is not by ownership -
- ( ) restrictive easement
- ( ) nuisance odor control
- ( ) variance -a written variance request is included with the application

The Following Is For Municipal And Industrial New & Amendment Applications

[X] The original ground level photos of treatment unit area, disposal or discharge areas (2 photos – one upstream, one downstream) have been provided

TECHNICAL REPORT – MUNICIPAL/DOMESTIC APPLICATIONS
THE FOLLOWING ITEMS APPLY TO <u>ALL MUNICIPAL APPLICATIONS</u>:

[X] The existing permitted design flow (including all permit phases) is indicated
( ) If flow indicated is greater than permitted, a major amendment is required.
( ) If flow amount is less than permitted amount, confirm with applicant that they are requesting to reduce the flow.

[ ] For facilities that have not been constructed the anticipated construction and operation dates is provided for all phases.

[ ] The permit authorizes irrigation/evaporation/subsurface disposal method, and the irrigation/evaporation/subsurface information has been addressed in the technical report. If the acreage is more than is currently permitted, a major amendment is required.
The applicable worksheets must be completed:
[ ] Worksheet 3.0 - required for land disposal of effluent
[ ] Worksheet 3.1 - required for land disposal (new and major amendment only)
[ ] Worksheet 3.2 - required for subsurface land disposal (new and major amendment only)
[ ] Worksheet 3.3 - required for subsurface area drip dispersal systems (SADDS) (new and major amendment); may be required for renewal on a case-by-case basis.

Note: See note below regarding SADD applications and compliance history information

[ ] SADDS Applications: Compliance history items must be completed for SADDS disposal. Currently the domestic application does not contain the compliance history info. We must use the SADDS errata form to obtain this information. Also, when the application is administratively complete, a copy of the application and a transmittal letter must be sent to the State Department of Health Services. See the folder titled "SADDS" (under the Individual Permit Review folder) for a template of the letter.

[ ] Worksheet 7.0 – required for SADD applications

[ ] Sludge disposal and/or land application is authorized in the permit on property owned or under applicant's control.
Note: If facility is beneficially applying class B sludge on the same site as the facility, the applicant must submit the Beneficial Land Use of Sewage Sludge (Class B) Permit Application - Form No. 10451 (See Class B Sludge Permit checklist). The applicant must also submit the appropriate sludge application fee.

If authorization is for sludge composting, marketing and distribution of sludge, sludge surface disposal, or sludge monofill or for temporary storage in sludge lagoons, the applicant must submit the Domestic Wastewater Permit Application: Sewage Sludge Technical Report – Form No. 10056.
Check for:
[ ] required signatures
[ ] site acreage
[ ] acreage application area
[ ] site boundaries on USGS map
Note: If the applicant is disposing or land applying sludge on land owned or under their control, but it is not authorized in their permit or by any other TCEQ authorization, a major amendment is required

[X] Worksheet 6.0 must be addressed if a domestic facility is labeled as public or both, (not required for federal agencies or water treatment plants)

THE FOLLOWING ITEMS ONLY APPLY TO <u>MUNICIPAL MINOR RENEWAL</u> APPLICATIONS:

[X] The type of treatment plant has been indicated.

[X] The flow diagram has been provided.

[ ] The list of units and their dimensions have been provided

[ ] The required grab sample test results have been provided for all constituents - *not required if plant not operational.* For water treatment plants, pollutants tested should be at least TSS, TDS, Flouride, and Total aluminum.

[X] Sludge disposal is authorized off site, and the ultimate sludge disposal method has been identified.

[ ] Worksheet 2.0 - For TPDES permits - the stream data has been addressed.

[ ] Worksheet 4.0 - For discharge permits: If the applicant has a permitted phase equal to or greater than 1 MGD or more than one phase, and interim or final phase(s) that has not been constructed has a flow equal to or greater than 1 MGD, the applicant must perform the all of the required effluent testing to renew that phase.

TECHNICAL REPORT – INDUSTRIAL APPLICATIONS

[ ] Description of type of activity and general nature of business

[ ] The flow volume for all outfalls is indicated
( ) Flow indicated is greater than permitted, a major amendment is required
( ) Flow indicated is less than permitted, confirm with applicant that they are requesting to reduce flow

[ ] Amendment and Modification Requests on Page 14 of the Tech Report: Check to see if there are any amendment or modification requests.

[ ] The permit authorizes irrigation/evaporation/subsurface disposal method, and the irrigation/evaporation/subsurface information has been addressed in the technical report. If the acreage is more than is currently permitted, a major amendment is required.

The applicable worksheets must be completed:

[ ] Worksheet 3.0 - required for land disposal of effluent

[ ] Worksheet 3.1 - required for land disposal (new and major amendment only)

[ ] Worksheet 3.2 - required for subsurface land disposal (new and major amendment only)

[ ] Worksheet 3.3 - required for subsurface area drip dispersal systems (SADDS) (new and major amendment); may be required for renewal on a case-by-case basis.

[ ] SADDS Applications: When the application is administratively complete, a copy of the application and a transmittal letter must be sent to the State Department of Health Services. See the folder titled "SADDS" (under the Individual Permit Review folder) for a template of the letter.

[ ] Worksheet 4.0 complete – TPDES only.

<u>The Following Items Only Apply to Quarries in The John Graves Riverway</u>

[ ] Worksheet 10 must be completed

[ ] Restoration plan must be submitted. Plan must be certified by a licensed Texas PE or a licensed Texas professional geoscientist.

[ ] Reclamation plan must be submitted for a quarry located 200 - 1,500 feet from a perennial water body. Plan must be certified by a licensed Texas PE or a licensed Texas professional geoscientist.

[ ] A technical demonstration document must be submitted for a quarry located 200 - 1,500 feet from a perennial water body.

[ ] Financial Assurance documents must be submitted:
[ ] Financial Assurance for the Restoration plan
[ ] Financial Assurance for the Reclamation plan (if reclamation plan must be submitted)
[ ] A copy of the original financial assurance documents (make a copy for our file) must be sent, via interoffice mail, to Teresa Nemec, of the Financial Assurance team. Accompanying the financial assurance documents, send the first 5 pages of the application, along with a copy of the restoration plan

and a copy of the reclamation plan (if a reclamation plan is submitted). We must have a signed memo from Teresa, stating that the financial assurance is satisfactory, before we can declare the application administratively complete.

Admin Complete PARIS Entry and Other Reminders

WQ Folder- Application Search

Application Summary Tab–verify application info

Admin Review Tab

- Admin Review Begin Date
- Admin Complete Date
- SPIF
- NORI

Public Participation Tab – Display Public Notice Details

- Alternative Language Required
- Public Notice Contact (contact in notice)
- Person Responsible for Publishing Notice
- Location for Public Viewing (add row) Enter info in Building Name field

CR Folder – RE Search

AI Detail Screen–verify facility info

Enter Contact Info – Contact List

- Owner
- Applicant
- Technical
- Billing (To edit existing info – select Billing Maintenance)
- MER (TLAP only)
- Remove CN affiliation for MER contact (TLAP and TPDES)

OTHER

- Copy of notice and labels to I/Drive
- SADDS – Application to Dept. of Health Services
- Email TXDOT if discharge is to a state highway right-of-way or roadside ditch.

Additional ID Detail	Map It	Copy Map It URL			
Additional ID Program:	WWPERMIT		Legacy System (Code):	(WQ)	
Additional ID:	WQ0014488003	Status:	PENDING	ID Type:	PERMIT
Name:	CITY OF DRIPPING SPRINGS SOUTH REGIONAL WWTP			Sec. Addn Id:	TX0136778, EPA ID
Physical Address:	23127 RANCH ROAD 150, DRIPPING SPRINGS, TX 78620				
Description:					
County:	HAYS	Region:	REGION 11 - AUSTIN		
Nearest City:	DRIPPING SPRINGS	State:	TX	Nearest Zip:	78620
Latitude:	30° 9 min 34 sec (30.159444)		Longitude:	98° 4 min 52 sec (-98.081111)	

0 Records

Industry Types			
Classification System	Code	Name	Primary Flag

1-1 of 1 Record

Site Classifications				
Program	Site Classification	Begin Date	End Date	CMS Min Freq Qty
WASTEWATER	DOMESTIC MINOR	10/20/2015	12/31/3000	0

1-1 of 1 Record

Customers		List All
CN Number	Name ▲	Role
CN602491284	CITY OF DRIPPING SPRINGS	OWN

Regulated Entity					
Reference Number:	RN104005434	Name:	CITY OF DRIPPING SPRINGS	Stand-Alone:	N
Business Description:	DOMESTIC N/D				

Location					
Address:	Not on file				
Description:	0.5 MI E OF RR 12 ON FM 150				
County:	HAYS		Region:	REGION 11 - AUSTIN	
Nearest City:	DRIPPING SPRINGS	State:	TX	Nearest Zip:	78620
Latitude:	30° 9 min 34 sec (30.1594)		Longitute:	98° 4 min 52 sec (-98.0811)	

Basis2 Receipt Report by Endorsement Number

OCT-26-15 08:49 AM

Acct. #: PTGQ Account Name: NOTICE FEES WQP WATER QUALITY PMT

Paid For	Endors. #	Ref #2	Paid In By	PayTyp	Chk #	Card#	Bank Slip	Tran.Date	Receipt Amnt.
	M603960B		CMA ENGINEERING INC	CK	10618		BS00045054	23-OCT-15	$50.00

Acct. #: WQP Account Name: WATER QUALITY PERMIT APPLICATION

Paid For	Endors. #	Ref #2	Paid In By	PayTyp	Chk #	Card#	Bank Slip	Tran.Date	Receipt Amnt.
DRIPPING SPRINGS, CITY OF/SOUTH REGIONAL	M603960A		CMA ENGINEERING INC	CK	10618		BS00045054	23-OCT-15	$1600.00

Report_ID:

USPS.COM

Look Up a ZIP Code™

Still Have Questions?
Browse our FAQs ›

ZIP Code™ By Address Cities by ZIP Code™

You entered:

PO BOX 384
DRIPPING SPRINGS TX

Look up another ZIP Code™ ›
Edit and Search Again ›

Here's the full address, using standard abbreviations and formatting.

PO BOX 384
DRIPPING SPRINGS TX 78620-0384

Show Mailing Industry Details

Applicant address

Customer Name: CITY OF CRYSTAL CITY
Account #: 0708404 Debtcollpath Stage: Calls:

Total of delinquent transactions (Account): $418.42

Account #: 0803088H Debtcollpath Stage: Calls:

WMS	SC00165495	LATE FEE - SEP 2015		10-SEP-15	10-SEP-15	$20.00

Total of delinquent transactions (Account): $20.00
Total of delinquent transactions (Customer): $438.42

Customer Name: CITY OF ELSA
Account #: 91080005 Debtcollpath Stage: Calls:

PHS	PHS0153962	WATER SYSTEM FEE	FY15	1080005	30-NOV-14	31-DEC-14	$.60

Total of delinquent transactions (Account): $.60
Total of delinquent transactions (Customer): $.60

Customer Name: CITY OF LITTLEFIELD
Account #: 20002129 Debtcollpath Stage: Calls:

GPS	SC00076699	LATE FEE - MAY 2012		10-MAY-12	10-MAY-12	$.70

Total of delinquent transactions (Account): $.70
Total of delinquent transactions (Customer): $.70

Customer Name: CITY OF OLTON
Account #: 91400004 Debtcollpath Stage: Calls:

PHS	PHS0154616	WATER SYSTEM FEE	FY15	1400004	30-NOV-14	31-DEC-14	$.90

Total of delinquent transactions (Account): $.90
Total of delinquent transactions (Customer): $.90

Customer Name: CITY OF OVERTON
Account #: 23605096 Debtcollpath Stage: Calls: HOLD

WQV	WQV0021718	ADMIN PENALTY	FY14	090452MWDE	30-NOV-13	31-DEC-13	$1180.00
WQV	WQV0022142	ADMIN PENALTY	FY14	090452MWDE	31-DEC-13	31-JAN-14	$1180.00
WQV	WQV0022286	ADMIN PENALTY	FY14	090452MWDE	31-JAN-14	28-FEB-14	$530.00
WQV	WQV0022499	ADMIN PENALTY	FY14	090452MWDE	28-FEB-14	31-MAR-14	$1180.00
WQV	WQV0024827	ADMIN PENALTY	FY15	090452MWDE	31-MAR-15	30-APR-15	$22401.00

Total of delinquent transactions (Account): $26471.00
Total of delinquent transactions (Customer): $26471.00

Customer Name: CITY OF PRAIRIE VIEW
Account #: 92370029 Debtcollpath Stage: Calls:

PHS	PHS0156819	WATER SYSTEM FEE	FY15	2370029	30-NOV-14	31-DEC-14	$.50

Total of delinquent transactions (Account): $.50
Total of delinquent transactions (Customer): $.50

Customer Name: CITY OF ROMA
Account #: 0708319 Debtcollpath Stage: Calls: WARHORD

SWD	SC00165405	LATE FEE - SEP 2015		10-SEP-15	10-SEP-15	$43.24

Total of delinquent transactions (Account): $43.24

Account #: 0800650H Debtcollpath Stage: Calls:

WMS	SC00165443	LATE FEE - SEP 2015		10-SEP-15	10-SEP-15	$5.00

USPS.COM

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Browse our FAQs ›

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23127 RANCH ROAD 150
DRIPPING SPRINGS TX

Look up another ZIP Code™ ›
Edit and Search Again ›

Unfortunately, this address wasn't found.
Please double-check it and try again.

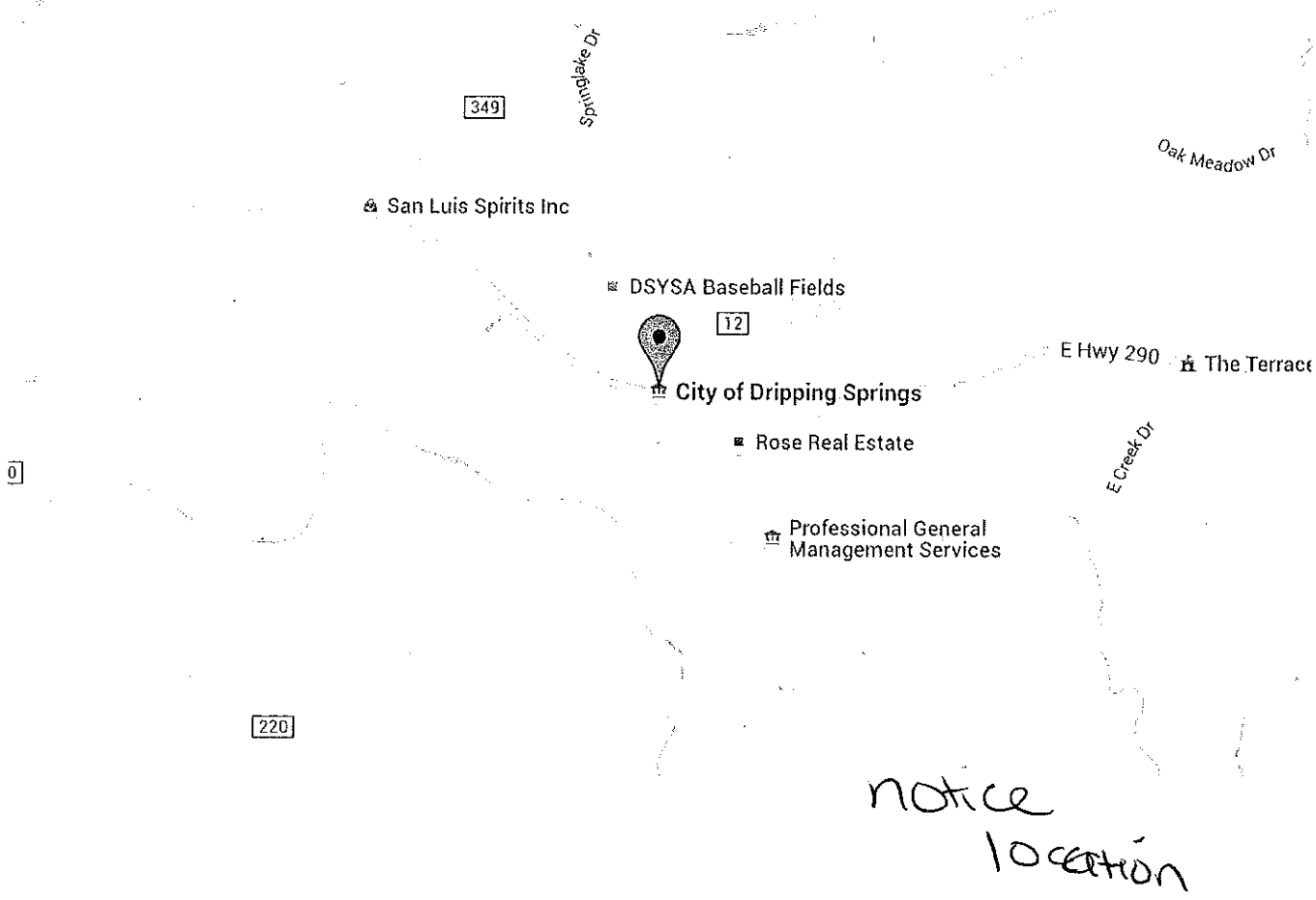
Facility address

Search or Enter a Tracking Number

City of Dripping Springs

511 Mercer St, Dripping Springs, TX 78620
(512) 858-4725

Google



TO: Water Program Manager
Region 11, Austin Office

FROM: Jan Sills, Water Resource Liaison
Field Operations Division

SUBJECT: Notice for Wastewater Permit Site Assessment

A permit site assessment is required for the following wastewater permit Application.

WQ Permit Number 14488 003

Applicant City of Dripping Sp.

Region 11

County Hays

(X) New Application ( ) Major Amendment

Discharge route for 1 (one) mile from point of discharge does contain water affected by tidal?
( ) Yes (✓) No

Date Application Mailed to Region _____

Date of Notice for PSA _____

Receiving Water Assessment Required ( ) Yes (✓) No

Type of Inspection PA

Due Date for Submittal of Inspection Report _____

Segment # 1427

If essential material is missing in the application which would preclude you from conducting the permit site assessment, please contact me as soon as possible at 239-0449.

Additional Comments TLAP → discharge, initial receiving stream likely intermittent or intermittent with pools. (JTrevino, 10/21/15)

INDUSTRIAL/MUNICIPAL APPLICATIONS ROUTE SHEET

New X

Major Amend___

Minor Amend___

Renewal_____

Major Facility___

Application Reviewer ✓ *Technical Reviewer*____

DATE APPLICATION RECEIVED 10/20/15 Hand Delivery

PERMIT NUMBER 1448803

PRE PREVIEW BY STANDARDS (RWA) 10/21/15 **N/A**_____
Applies to new and major amendments, Discharge Only. The original applications must be returned to the applications team within 4 hours of receipt.

PREVIEW BY GROUNDWATER _____ **N/A** ✓
Applies to new and major amendments, and TLAP Renewals for Industrial

PRE TECH REVIEW REQUIRED 10/21/15 **N/A**_____
Applies to new, major amendments and major facilities for Municipal

COASTAL ZONE DETERMINATION _____ **N/A** ✓
Route copy of new application when he facility is located in the noted county

COMMENTS ARE DUE TO APPLICATIONS TEAM BY CLOSING ON 10/28/15

*PRE TECH REVIEW PERFORMED BY*_____

THE ATTACHMENT SHOULD BE PROVIDED TO THE APPLICATIONS TEAM AT THE END OF THE 5TH WORKING DAY

Coastal Zone Determination

(To Be Verified Upon Receipt Of The Application)

Permit Number 14488503 **County** Hays

Indicate Type of Application:

☐ **Renewal** ☐ **Minor Amendment** ☐ **Major Amendment**

Is the facility on the Coastal Zone list?

☐ YES (Coastal Zone statement will be included in the "Notice of Draft Permit") (If a major amendment - statement will be included in the "Notice of Receipt")

☐ NO (Do not include statement in any notice)

☒ **New** ☐ **Major Amendment**

Is the facility located in one of the following counties?

☐ Aransas	☐ Galveston	☐ Kleberg	☐ San Patricio
☐ Brazoria	☐ Harris	☐ Matagorda	☐ Victoria
☐ Calhoun	☐ Jackson	☐ Nueces	☐ Willacy
☐ Cameron	☐ Jefferson	☐ Orange	
☐ Chambers	☐ Kenedy	☐ Refugio	

☐ YES Send the application to Water Quality Assessment Team for Coastal Zone Determination.

☒ NO No further review needed (Do not include statement in any notice)

Water Quality Assessment Team's determination:

Is the discharge in the Coastal Zone?

☐ YES Coastal Zone statement shall be included in the Admin Complete Notice

☐ NO Do not include statement in the Admin Complete Notice

Return to Applications Team by _____

Texas Commission on Environmental Quality
Domestic Wastewater Permit Application for

City of Dripping Springs
South Regional Wastewater Facilities

Hays County, Texas

Prepared for:

City of Dripping Springs
P.O. Box 384
511 Mercer Street
Dripping Springs, Texas 78620

Prepared by:

CMA Engineering, Inc.
235 Ledge Stone Dr.
Austin, Texas 78737
(512) 432-1000

October 2015

CMA Job No.: 1695-001

Firm Registration No. 3053

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ DOMESTIC WASTEWATER PERMIT APPLICATION DOMESTIC ADMINISTRATIVE REPORT

Submit this checklist with the application. Do not submit the instructions with the application. Indicate if the following are included in the application.

APPLICANT City of Dripping Springs

PERMIT NUMBER WQ0014488003

WORKSHEET	Y	N		Y	N
Administrative Report 1.0	☒	☐	Affected Landowner Map	☒	☐
Administrative Report 1.1	☒	☐			
SPIF	☒	☐	Buffer Zone Map	☒	☐
Technical Report 1.0	☒	☐	Flow Diagram	☒	☐
Technical Report 1.1	☒	☐	Site Drawing	☒	☐
Worksheet 2.0	☒	☐	Original Photographs	☒	☐
Worksheet 2.1	☐	☒	Design Calculations	☒	☐
Worksheet 3.0	☐	☒	Design Features	☒	☐
Worksheet 3.1	☐	☒	Solids Management Plan	☒	☐
Worksheet 4.0	☐	☒	Water Balance	☐	☐
Worksheet 5.0	☐	☒	Landowner Disk or Labels	☒	☐
Worksheet 6.0 (required for all POTWs)	☒	☐	Copy of Application Fee Check	☒	☐
Worksheet 7.0	☐	☒			
Original USGS Map	☒	☐	All Fees Owed TCEQ are Paid	☒	☐

Please indicate the amount submitted for the application fee (check only one):

Flow	New/Major Amendment	Renewal
<0.05 MGD	☐ $350.00	☐ $315.00
≥0.05 but < 0.10 MGD	☐ $550.00	☐ $515.00
≥0.10 but < 0.25 MGD	☐ $850.00	☐ $815.00
≥0.25 but < 0.50 MGD	☐ $1,250.00	☐ $1,215.00
≥0.50 but < 1.0 MGD	■ $1,650.00	☐ $1,615.00
≥ 1.0 MGD	☐ $2,050.00	☐ $2,015.00
Minor Amendment (any flow)	☐ $115.00	

RECEIVED
OCT 2 0 2015
Water Quality Division
Application Team

A copy of the application fee check must be submitted with the application.

FOR COMMISSION USE ONLY

Segment Number New County Hays

Expiration Date New Region 11

Proposed/Current Permit Number 14488003 TX0136778